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BULLETIN DU MUSÉUM NATIONAL D'HISTOIRE NATURELLE
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Tortricidae of the Andringitra Range, Central Madagascar (Lepidoptera) [1]. Part 1. Tortricinae

by Alexey Diakonoff *

Abstract. — The present paper contains records of 46 species, belonging to 13 genera, of which one genus, 14 species and one subspecies are described as new. Sketches of head and wing neuration of the new genus and figures of genitalia of new species are presented.

Résumé. — Dans la présente note 46 espèces de Tortricidae Tortricinae capturées dans le massif de l'Andringitra (Madagascar Centre) sont étudiées. Elles appartiennent à treize genres, dont un est nouveau. Quatorze espèces et une sous-espèce sont décrites comme nouvelles. Des dessins de la tête et de la nervation des ailes du nouveau genre sont données, ainsi que les figures des genitalia des nouvelles espèces.

Dr P. E. L. Viette kindly entrusted me with the study of rich and excellently preserved material of the Muséum national d'Histoire naturelle of Paris, from the Andringitra Range, Central Madagascar.

The greatest part of this material originates from two localities, viz. : (**1**) Andringitra méridional, chaîne de l'Andrinony, cirque de Manjarivolo, 1 640 m, 26.x-4.xi.1970 (P. Viette) and (**2**) Andringitra oriental, forêt d'Anjavidilava, 1 975, 1 990, 2 000 and 2 005 m, 19-25.xii and 1-15.i.1970-1971 (P. Griveaud). For the sake of brevity these localities are indicated below simply as Manjarivolo and Anjavidilava, respectively, followed by altitude and date, except under descriptions of new species. All other localities are cited in full.

An interesting geomorphological, climatological and botanical survey of the Andringitra Range of the hand of a group of scientists has appeared recently (Paulian *et al.*, 1971).

Digitosa leptographa Diak.

Diakonoff, 1960 : 24, fig. 17-18, pl. 3, fig. 15, pl. 41, fig. 16-17. — 1961 : 152. — 1970 : 104.

Distribution. East Madagascar : Ambatondrazaka ; Andranomalaza ; Sandrangato Forest. — North Madagascar : Tsaratanana Range.

1. Research project (Recherche Coopérative sur Programme n[o] 225) of the Centre national de la Recherche scientifique). See : *Bull. Soc. Écologie*, 1971, 2 (2-3) : 189-266.

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Anjavidilava 1 975-2 005 m, 19-25.XII.1970-1-15.I.1971 (*P. Griveaud*), 7 ♂, 12 ♀, genit. slide 8275.
Manjarivolo (*P. Viette*), 1 ♂.

Digitosa metaxantha Diak.

Diakonoff, 1960 : 27, pl. 3, fig. 13-14 (♂).

Distribution. East Madagascar : Andranomalaza.
Anjavidilava, 2 005 m, 1-15.I.1971 (*P. Griveaud*), 1 ♂.
Manjarivolo (*P. Viette*), 1 ♂, genit. slide 8532.

Parapandemis griveaudi Diak.

Diakonoff, 1960 : 45, fig. 42-43, pl. 6, fig. 33-33a, pl. 8, fig. 44-45, pl. 9, fig. 48. — 1961 : 152. — 1970 : 105.

Distribution. East Madagascar : Ambatondrazaka ; South Moramanga ; Italaviana ; Marojejy Range ; Sandrangato Forest. Central Madagascar : Betsileo country ; Nature Reserve III. North Madagascar : Tsaratanana Range, 1 900-2 362 m.
Manjarivolo (*P. Viette*), 3 ♂.

Parapandemis plutosema Diak.

Diakonoff, 1960 : 49, pl. 8, fig. 41-43. — 1961 : 152.

Distribution. Central Madagascar : Ankazobe district ; Ambatondrazaka district ; Manjakandriana district ; Ambatolampy district ; Ambalavao district.
Anjavidilava, 1 975-2 005 m, 19.XII.1970-15.I.1971 (*P. Griveaud*), 12 ♂, 3 ♀.
Manjarivolo (*P. Viette*), 1 ♂.

Parapandemis retroflua Diak.

Diakonoff, 1960 : 53, fig. 48-49, pl. 10, fig. 55-56. — 1970 : 105.

Distribution. Central Madagascar : Ankaratra Range, Ambatolampy district. East Madagascar : Marojejy Range ; Moramanga district. North Madagascar : Tsaratanana Range, up to 2 000 m.
Anjavidilava, 1 990, 2 000 and 2 005 m, 19-25.XII and 1-15.I.1970-1971 (*P. Griveaud*), 8 ♂.
Manjarivolo (*P. Viette*), 3 ♂, 1 ♀.

Parapandemis subovata Diak.

Diakonoff, 1970 : 109, fig. 6, pl. 7, fig. 4-5.

Distribution. North Madagascar : Tsaratanana Range, 1 900-2 050 m.
Manjarivolo (*P. Viette*), 2 ♂.

Parapandemis capnobathra (Meyr.)

Homona capnobathra Meyrick, 1930 : 605. — Viette, 1947 : 56. — Clarke, 1955 : 73. — 1958 : 148, pl. 74, fig. 2-2b.
Parapandemis capnobathra : Diakonoff, 1960 : 52, pl. 7, fig. 4, pl. 9, fig. 49-50 (♂). — 1970 : 106.
Parapandemis euphana Diakonoff, 1960 : 59, pl. 38, fig. 252-253 (♀).

Distribution. East Madagascar : Moramanga, Ankasoka. North Madagascar : Tsaratanana Range.
Manjarivolo (*P. Viette*), 2 ♀.

Parapandemis sclerophylla Diak.

Diakonoff, 1960 : 60, pl. 14, fig. 80-81. — 1970 : 111.

Distribution. Central Madagascar : Nature Reserve III, Ivelona Valley.
Anjavidilava, 1 990, 1 975 and 2 005 m, 19.xii.1970-15.i.1971 (*P. Griveaud*), 13 ♂.

Parapandemis straminocula plectopa Diak.

Diakonoff, 1960 : 71, pl. 11, fig. 67-68, pl. 13, fig. 78. — 1970 : 112.

Distribution. Central Madagascar : Ankazobe, Ambohitantely; Ambatolampy. East Madagascar : Ankasoka. North Madagascar : Tsaratanana Range.
Anjavidilava, 1 990 m, 19-25.xii.1970 (*P. Griveaud*), 1 ♂.

Parapandemis euryloncha sp. nov.
(Fig. 1-2)

♂ 16 mm. Head whitish, vertex suffused with pale ochreous. Palpus pale ochreous, terminal segment rather long. Thorax pale grey. Abdomen whitish, touched with fuscous, glossy.

Fore wing rather broad, subtruncate, costa arched anteriorly, almost straight, hardly curved posteriorly, apex moderately pointed, termen sinuate above, vertical, moderately rounded below. Ochreous-white with a golden gloss, markings light fuscous mixed with ferruginous, strewn with a few black points. Basal patch to about 1/4, edge angulate in middle, moderately concave above and below this ; central fascia from well before middle, oblique, gently dilated downwards but suffused and obliterate below middle of cell, only posterior half of fascia extending as far as end of cell, rather tinged fulvous, with three large black dots in a horizontal row in middle of cell ; costal patch semioval, paler, grey-fuscous, including two spots of ground colour on costa, top touching upper angle of cell and with that, the central fascia ; an oblique blotch from beyond middle of posterior edge of costal patch to 2/3 of termen ; apex and upper half of termen suffused with fuscous-ferruginous ; entire wing finely marbled with darker fuscous, forming short strigulae, interconnecting other markings. Cilia ochreous-fuscous (damaged).

Hind wing pale ochreous with a golden gloss, apical third suffused with tawny and indistinctly dotted with fuscous. Cilia pale ochreous, around apex and along upper half of termen infuscated.

Male genitalia. Very near those of *P. marginumbra* Diak., but with a distinctly broader, rhomboidal uncus and a slightly longer saeculus, so that lower angle (top) of valva in more pointed.

Madagascar Centre, Andringitra oriental, forêt d'Anjavidilava, 2 005 m, 1-15.I.1971 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8280.

A single, rather rubbed specimen, with the genitalia very close to those of *marginumbra*. However, the broader uncus, together with the completely different colouring and markings, compel me to separate this species.

Parapandemis xanthacra Diak.

Diakonoff, 1960 : 66, pl. 12, fig. 69-70, pl. 13, fig. 77 (♂ ♀). — 1970 : 111.

Distribution. East Madagascar : Moramanga. North Madagascar : Tsaratanana Range.

Manjarivolo, 1 650 m, 26.x-4.xi.1970 (*P. Viette* & *P. Griveaud*), 1 ♀, genit. slide 8277.

Madagascar Nord, massif du Tsaratanana, piste de Mangindrano, au Maromokotra, au sud du piton coté 2 831 m, 13-15.xi.1966, 2 500 m, " Mission du Tsaratanana xi.1966, camp n°. 3 (*P. Griveaud, P. Soga, P. Viette et D. Wintrebert*) ", 1 ♀, genit. slide 8276.

Note : This specimen has been erroneously attributed by me to *Niphothixa atava* Diak. (paratype : Diakonoff, 1970 : 114, line 10 from top).

Cuspidata (**Cuspidata**) **ditoma peratra** subsp. nov.

♂ 16 mm. Head and thorax grey-purple. (Palpi missing.) Abdomen fuscous.

Fore wing truncate, broad, costa strongly sinuate : obliquely arched anteriorly, rounded-prominent at 2/5, concave and impressed before apex, apex pointed and produced, termen sinuate, moderately oblique. Evenly deep blackish-purple, rather lustreless. Central fascia faintly indicated by dull darker purple colour, from 3/5 of costa to 3/4 of dorsum, rather straight, narrower along upper third, moderately dilated in middle ; on costa this fascia followed by an oblique blotch of faintly glossy anthracite colour, a trifle paler than ground colour and hardly visible in certain lights, reaching halfway across wing ; other markings indefinite. Cilia concolorous.

Hind wing rather light fuscous-grey, darker fuscous-purplish towards apex and on posterior half. Cilia pale fuscous, with a darker subbasal band (imperfect).

Male genitalia. Similar to those of the nominate form.

Anjavidilava, 2 005 m, 1-15.i.1971 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8535.

The single specimen available is so distinct from the earlier described *ditoma* (a widely distributed species of middle high altitudes, 800-950 m), with regard to the colouring, markings and the shape of the fore wing, that I do not venture to include it, but prefer to regard the only male a melanistic subspecies of higher altitudes. The genitalia are in all details similar to those of *ditoma*. Future collecting will provide additional proof, I hope.

Cuspidata (Cuspidata) castanea Diak.

(Fig. 3)

Diakonoff, 1960 : 187, pl. 15, fig. 88-89 (♂).

Distribution. Central Madagascar : Manjakandriana ; Ambatondrazaka.
Anjavidilava, 2 005 m, 1-15.i.1971 (*P. Griveaud*), 1 ♂, gent. slide 8273.

♀ 20-22 mm, apallotype [1]. Head, palpus and thorax rather deep tawny-fulvous, palpus actually dusted with dark grey (shorter and more triangular than in *C. anthracitis*). Abdomen with venter dull light ochreous, sides glossy whitish, dorsum infuscated.

Fore wing oblong, rather dilated, costa sinuate throughout (because of the prominent costal cilia .at apex), apex rectangular, termen slightly sinuate, vertical above, rounded and slightly prominent below. Rather deep tawny-fulvous with vinaceous tinge, obscured by grey-purplish darker suffused marbling and strewn with minute transverse dark strigulae ; a group of sparse scattered dark purple transverse strigulae of slightly elevated scales over anterior half of disc above middle, not reaching costa and an oblique and slightly curved regular series of similar deep purple points from below 2/3 of costa reaching to middle of disc and apparently following anterior edge of (indefinite) costal patch ; a slightly paler fulvous, curved band from 3/5 of costa, just preceding above mentioned series of dots ; termen and tornus a trifle paler and faintly orangeish tinged. Cilia fulvous, lighter around apex and along upper half of termen, basal third throughout deeper grey-purple.

Hind wing light yellow, brighter than in male, a trifle paler towards base and dorsum, apex irregularly spotted with dark grey, spots quickly becoming sparse and small anteriorly and along termen. Cilia pale yellow, along upper half of termen and around apex light grey, with a blackish subbasal band.

Female genitalia : Characteristic by the throughout sclerotized sterigma, with lamella postvaginalis at the sides high and broad, somewhat resembling that in *C. ditoma* Diak. (but there sterigma subhyaline and lamella antevaginalis differently shaped), and also by the presence of a slender, serrulate dark cestum with about five coils (absent in most other species) ; ductus busae also with five coils only.

Anjavidilava, 1 990 m, 19-25.xii.1970 (*P. Griveaud*), 1 ♀, apallotype, genit. slide 8531 ; the same, 1 ♀.

1. The new term apallotype (= apo-allotype) is proposed for the substitution of the debatable term " neallotype ".

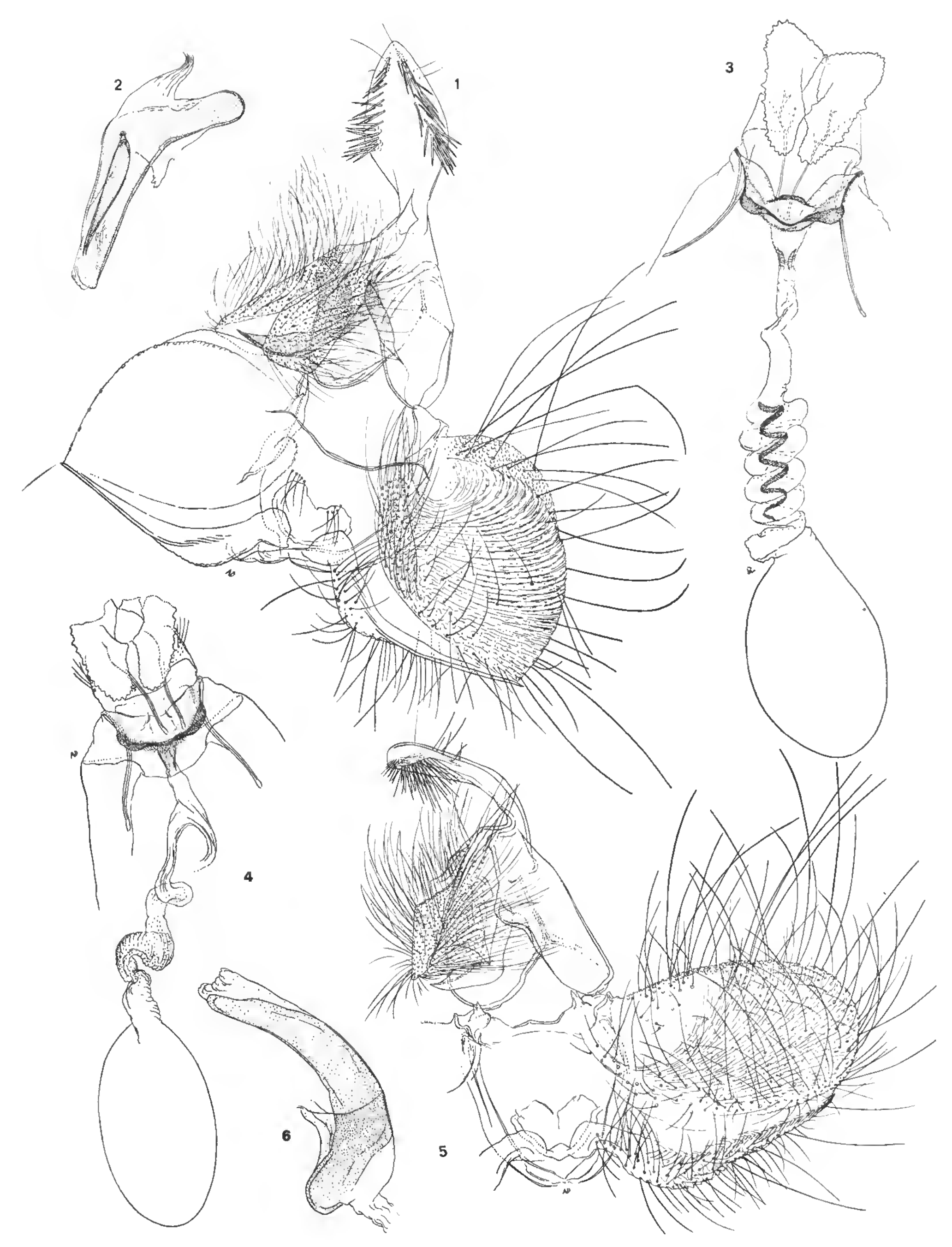


Fig. 1-6. — Genitalia of Madagascan Tortricinae. 1, *Parapandemis euryloncha* sp. nov., ♂, holotype ; 2, the same, aedeagus ; 3, *Cuspidata castanea* Diak., ♀, apallotype ; 4, *C. micaria* sp. nov., ♀, allotype ; 5, the same, ♂, holotype ; 6, the same, aedeagus.

Cuspidata (Cuspidata) micaria sp. nov.
(Fig. 4-6)

♂ 16-17 mm, ♀ 16-19 mm. Head and thorax deep fulvous. Palpus paler fulvous, slightly suffused with grey. Abdomen pale yellowish-ochreous.

Fore wing oblong-truncate, rather broad, dilated along basal third, costa sinuate, being arched along basal 2/3, apex gently prominent and pointed, termen sinuate, rounded below, vertical. Ferruginous, indistinctly spotted with darker, roundish spots which actually are formed by deep ferruginous scales with narrow whitish bases (giving striated appearance to spots) ; a suffused straight, oblique, pale fulvous fascia from costa well beyond middle, towards tornus, rather well-defined along upper half of wing, but edges gently suffused ; below this fascia disappears in pale fulvous posterior third or fourth of wing which does not reach wing margin and is traversed by suffused ferruginous streaks along veins ; sometimes origin of fascia obscured by ground colour ; posterior fourth of wing with numerous black crescentic strigulae tending to form oblique parallel series ; anterior half of dorsum with variably extended, more or less contiguous spotting with bright orange, strewn with reddish scales ; these spots round, arranged in more or less vertical series, obliterate above fold, except a pair at 1/3 and a single spot at 2/3. Cilia deep ferruginous.

Male genitalia. Nearest to those of *C. ditoma* Diak., but differing by the slightly more gradually narrowed sacculus, with the concavity of its upper side more basal, and by the less curved aedeagus.

Female genitalia differing from those of *ditoma* by a much shorter and less coiled ductus bursae.

Andringitra oriental, forêt d'Anjavidilava, 1 990 and 2 005 m, 19-25.xii.1970 and 1-15.i.1971, respectively (*P. Griveaud*), 4 ♂, 10 ♀. Closely allied with *C.* (*C.*) *ditoma* Diak., but superficially quite distinct by much darker colouring, continuous fasciate dark anterior edge of pale band (in *ditoma* reduced to a small costal triangle) and strong reduction of posterior edge of that band (in *ditoma* usually a series of dark purple dots), and presence of orangeish dotting on dorsum.

Madagascar Centre, Andringitra méridional, chaîne de l'Andrianony, cirque de Manjarivolo, 1 650 m, 26.x-4.xi.1970 (*P. Viette*), 1 ♂, genit. slide 8332 ; the only specimen with distinctly darker, fuscous-purplish hind wings, but otherwise similar to the holotype.

Cuspidata (Cuspidata) oligosperma Diak.

Diakonoff, 1960 : 83, fig. 54-55, 58-62, pl. 16, fig. 94. — 1970 : 114.

Distribution. East Madagascar : Analamazoatra ; Andranomalaza ; Sandrangato Forest. North Madagascar : Montagne d'Ambre ; Tsaratanana Range. Central Madagascar : Ambatondrazaka district ; Ambatolampy district.

Anjavidilava, 2 005 m (*P. Griveaud*), 1 ♂, genit. slide 8272.

Cuspidata (Cuspidata) anthracitis Diak.

Diakonoff, 1960 : 88, pl. 15, fig. 93. — 1970 : 144.

Distribution. East Madagascar : Ambatondrazaka. North Madagascar : Tsaratanana Range.

Anjavidilava, 1 975, 1 990, 2 005 m, 26-30.xii.1970,19-25.xii.1970, 1-15.i.1971 (*P. Griveaud*), 6 ♂, 4 ♀, genit. slide 7307 ♂.

Cuspidata (Pilophorica) leptozona Diak.

Diakonoff, 1960 : 90, fig. 7-8, 67a, pl. 16, fig. 99-100. — 1963 : 134.

Distribution. East Madagascar : Analamazoatra, Sandrangato. Central Madagascar : Ankaratra Range.

Anjavidilava, 1 990 m, 19-25.xii.1970 (*P. Griveaud*), 1 ♂.

Metamesia synclysa sp. nov.
(Fig. 7-10)

♂ 17-18 mm. Head whitish. Palpus light fuscous, inner side whitish. Thorax pale grey, tegula infuscated. Abdomen pale fuscous-greyish, anal tuft whitish-ochreous tinged.

Fore wing oblong-oval, costa considerably and gradually curved from base to apex, apex pointed and slightly prominent, termen strongly sinuate above, flatly rounded below, oblique. Even, rather pale grey, costa narrowly suffused with dark grey. Markings formed by grey-fuscous suffusion, but little contrasting. Basal patch to 1/4, hardly perceptible in holotype (indefinite in paratype), edge somewhat irregular, outwards-oblique ; central fascia from well before middle, to end of dorsum, moderately broad, slightly dilated, anterior edge entire, suffused, gently convex, posterior edge with a small tooth in middle, gently concave and ill-defined above this, somewhat irregular below ; costal patch rather small, oblong, obliquely triangular, top rounded ; this patch almost confluent with a large triangular spot along termen, with truncate top (in paratype smaller, well-separate from costal patch) ; these two markings rather suffused. Cilia concolorous but paler and more glossy.

Hind wing whitish, touched with creamy and very pale fuscous (in paratype with a golden gloss). Cilia concolorous.

Male genitalia. Resembling those of *M. nolens* Diak. most and similarly rather strongly sclerotized, but uncus longer, rounded, with a not dilated, but slightly notched top ; gnathos stronger, arms broader, along their bases and basal halves denticulate outwardly. Labis oblong-oval, denticulate on top, denticles finer than in *nolens*. Valva similar. Aedea-

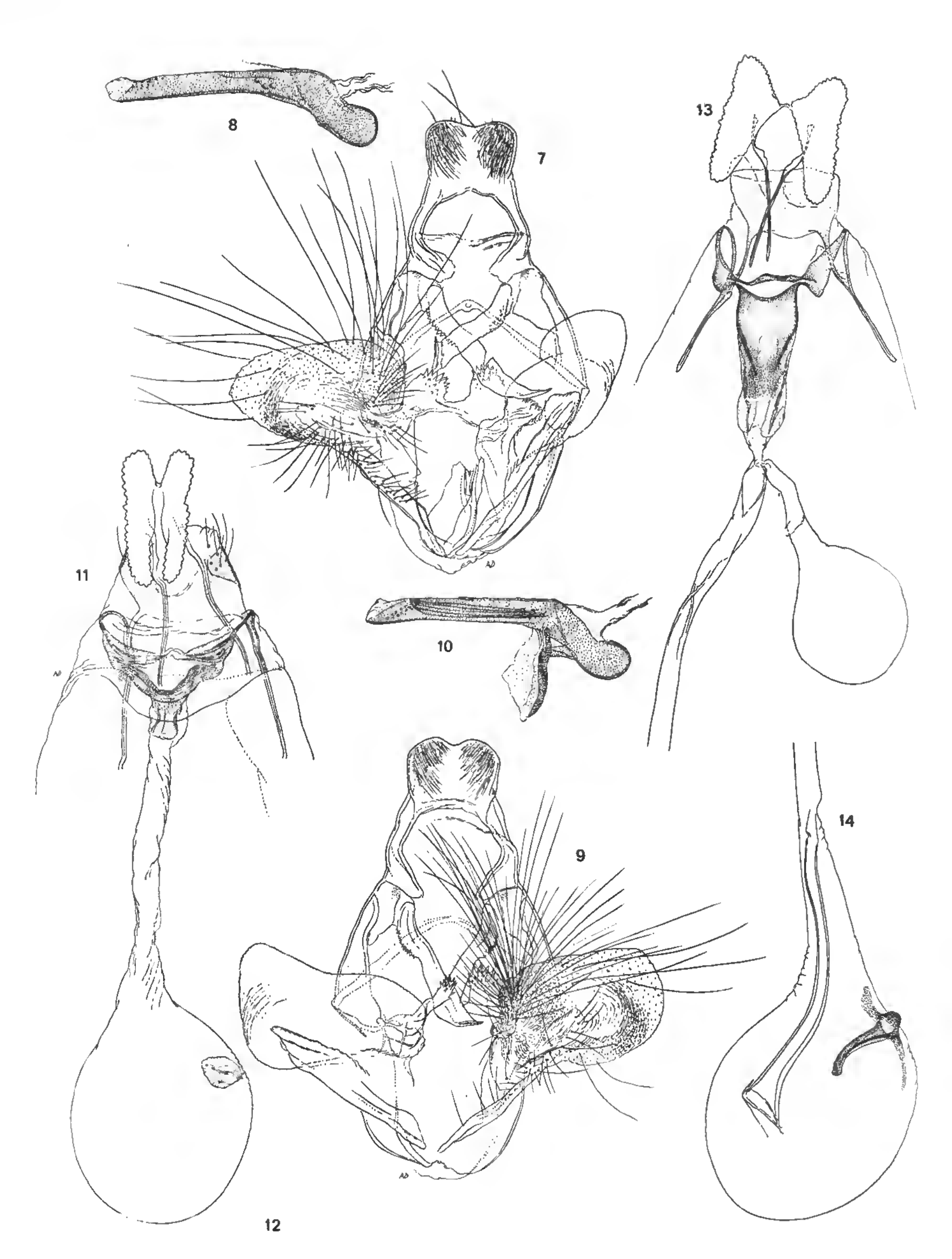


Fig. 7-14. — Genitalia of Madagascan Tortricinae. 7, *Metamesia synclysa* sp. nov., ♂, holotype ; 8, the same, aedeagus ; 9, the same, ♂, paratype, genit. slide 8497 ; 10, the same, aedeagus ; 11, *M. leptodelta* sp. nov., ♀, holotype ; 12, the same, bursa ; 13, *Goniotorna* (*Oestophyes*) *irresoluta* Diak., ♀, slide 8352 ; 14, the same, bursa.

gus long and straight, basal third slightly dilated, caecum rounded, little oblique ; a small group of denticles on upper side just before top and bases of three large cornuti perceptible.

Andringitra centre, cirque Boby, 2 500 m, 24-28.xi.1970 (*P. Soga*), 1 ♂, holotype, genit. slide 8495 ; 1 ♂, paratype, genit. slide 8497.

Metamesia leptodelta sp. nov.
(Fig. 11-12)

♀ 16 mm. Head and palpus light brown. Thorax brown-fuscous. Abdomen grey.

Fore wing narrow, costa curved along basal half, apex acutely pointed, termen concave, very oblique, lower third rounded-prominent. Pale ochreous, rather densely irrorated with light brown and light fuscous, markings rather dark brown. Basal patch to 1/4, darker ochreous-tawny, denser irrorated with fuscous, but still little contrasting ; its edge with upper half little outwards-oblique and straight, lower half concave, almost vertical, central fascia from beyond 2/5, moderate, hardly dilated and rather straight to end of dorsum ; costal patch moderate and rather narrow, obliquely triangular, connected with fascia above its middle ; a slender outwards-concave preterminal fascia from apex, gradually dilated downwards and merging in lower end of central fascia. Cilia pale ochreous.

Hind wing whitish-ochreous, vein 1 b and apex gently infuscated.

Female genitalia. Resembling those of *M. peracuta* Diak., but differing as follows : lobes of 9th sternite short, by far not meeting ventrally (in *peracuta* touching each other in middle). Lamella postvaginalis, a sclerotized bar, narrower in middle (in *peracuta* membraneous) ; lamella antevaginalis rather similar, but at the sides upper edge distinctly incised, incision curving downwards ; colliculum shorter. Signum shorter. Also resembling the genitalia of *M. retrocitra* Diak., but sterigma much more robust, colliculum wider and especially : signum quite distinct, cone-shaped (in *retrocitra* blade-like).

Andringitra central, cirque Boby, 2 500 m, 24-28.x.1970 (*P. Soga*), 1 ♀, holotype, genit. slide 8336. A slender, narrow-winged species, with long acute apex, superficially surprisingly similar to *Goniotorna* (*Tenuisaccula*) *mianta* sp. n. male, but by closer inspection revealing its true nature.

Anthophrys spectabilis Diak.

Diakonoff, 1960 : 122, fig. 143-154, pl. 22, fig. 74. — 1970 : 116.

Distribution. North Madagascar : Tsaratanana Range. Central Madagascar : Betsileo Country ; Andringitra Range, Anjavidilava. East Madagascar : Moramanga district ; Ambatondrazaka district ; Marojejy Range.

Anjavidilava, 1 975, 1 990, and 2 005 m (*P. Griveaud*). 32 ♂.

Ouest du Vohidray (Andringitra), Ambalamarovandana, 1 530 m, 16-21.I.1971 (*P. Griveaud*), 1 ♂.

Manjarivolo (*P. Viette*), 1 ♂.

Goniotorna (Oestophyes) verticillata, group of species

This group of closely allied and rather similar species presents considerable difficulties. Described after very few specimens, the species showed sufficient genital differences in the two sexes. Now that good series of each species are available, they prove that the species indeed are distinct ; that they are little variable and that the genital characters are constant. Still their discrimination is far from easy, because both the superficial and the genital differences are fairly small. Therefore I am presenting elaborate drawings of the genitalia.

In the males the most important parts are the shape of the transtilla with the labides, the sacculus and the shape and armature of the aedeagus. In the females the shape of the entire sterigma is characteristic.

The transtilla is mostly shaped as a slender transverse rod, with central part turning down and acculade-shaped, while the labides, rising at each end of the transtilla, are double : a ventral arm, usually broader (in mount situated on top of the other arm) and a more dorsal, often slender and dentate labis proper (in mount, underneath the ventral arm). Each of the pairs has a specific shape.

Goniotorna (Oestophyes) praerupta Diak.

Diakonoff, 1960 : 136, pl. 24, fig. 159, 159a.

Distribution. East Madagascar : Anosibe road, Sandrangato forest.

Anjavidilava, 1 990 m (*P. Griveaud*), 1 ♂, genit. slide 8337 ; 1 ♂, genit. slide 8534.

Goniotorna (Oestophyes) trigodes sp. nov.
(Fig. 43-46)

♂ 19 mm. Head pale tawny, faintly spotted darker. Palpus tawny, towards apex suffused with blackish. Thorax pale ochreous, anterior third suffused with fulvous-tawny. Abdomen pale ochreous, rather suffused with greyish, anal tuft grey.

Fore wing truncate, rather broad, distinctly dilated, costa arched almost throughout, straight only before apex, apex subobtuse, a trifle projecting, termen very gently sinuate and vertical above, rounded beneath. Pale ochreous-tawny, markings much suffused deeper fulvous-tawny, partly ill-defined. Basal fourth of costa with a suboval suffusion ; central fascia from just before middle of costa to 3/4 of dorsum, light tawny, densely but

faintly marbled with deeper brownish-tawny ; narrow along upper fourth, dilated 4 × and roundish in disc, moderately narrowed again on dorsum, anterior edge with a few irregular slender projections below, posterior edge suffused and somewhat irregularly scalloped, convex except above ; coarse and sparse transverse marbling on dorsum between base and central fascia, partly connected with latter and with a more or less isolated spot on upper edge of cell at 1/3 of wing ; costal patch ill-defined, represented by two tawny-fulvous costal spots, on ends of each veins 11 and 10 ; apex from 2/3 of costa to tornus suffused with deeper tawny-fulvous and faintly marbled with still deeper fulvous, this darker marbling tending to form two curved subapical series of spots. Cilia light tawny-fulvous (imperfect).

Hind wing whitish-ochreous with a golden gloss, apex gently suffused with deeper ochreous-yellow. Cilia concolorous.

One paratype, genit. slide 8290 ♂, 22 mm, evenly deeper vinaceous tinged, with marbling rather obscured and indefinite, but central fascia of similar shape, only darker and well-defined ; posterior third of costa of similar cloudy deep vinaceous suffusion, irregular vertical series of purple points before termen. Hind wing with somewhat deeper vinaceous-suffused apex. The genitalia similar to the type, except tip of labis which is finely spinose (instead of single). Otherwise similar to the type, also the characteristic serrulate edge of sacculus.

Male genitalia. Rather similar to those of *G.* (*O.*) *irresoluta* Diak., but with shorter and more robust labis, strongly spined on top (in paratype with only a couple of spines), and differing from all other species of the subgenus by finely serrate edge of sacculus. Pulvinus long-haired. Aedeagus with a dark and flat apical bicuspidate process.

Madagascar Centre, Andringitra central, forêt d'Anjavidilava, 1 990 m, 19-25.xii.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8525 ; 1 ♂, paratype, genit. slide 8519.

Madagascar Centre, Andringitra méridional, chaîne de l'Andrianony, cirque de Manjarivolo, 1 650 m, 26.x-4.xi.1970 (*P. Viette*), 2 ♂, paratypes, genit. slides 8290 and 8346.

A distinct species, recognizable by pale fulvous colouring and pale yellowish hind wings.

Goniotorna (Oestophyes) irresoluta irresoluta Diak.

(Fig. 13-14, 18-19, 25-26)

Diakonoff, 1960 : 137, pl. 24, fig. 158, 188a (♂).
Goniotorna (*Oestophyes*) *mesostena* Diakonoff, 1963 : 134, pl. I, fig. 3, pl. II, fig. 1-2 (♀). Syn. nov.

Distribution. East Madagascar : Ampitameloka, 840 m ; Périnet ; Andranomalaza.

Anjavidilava, 1 975-1 990 m, 19-30.xii.1970 (*P. Griveaud*), 17 ♂, 11 ♀, genit. slides, ♂ 8340, ♀ 8293, 8352.

A somewhat variable species, distinct, however, by the well-defined edges of the three usual markings : the basal patch, the central fascia and the costal patch. Especially

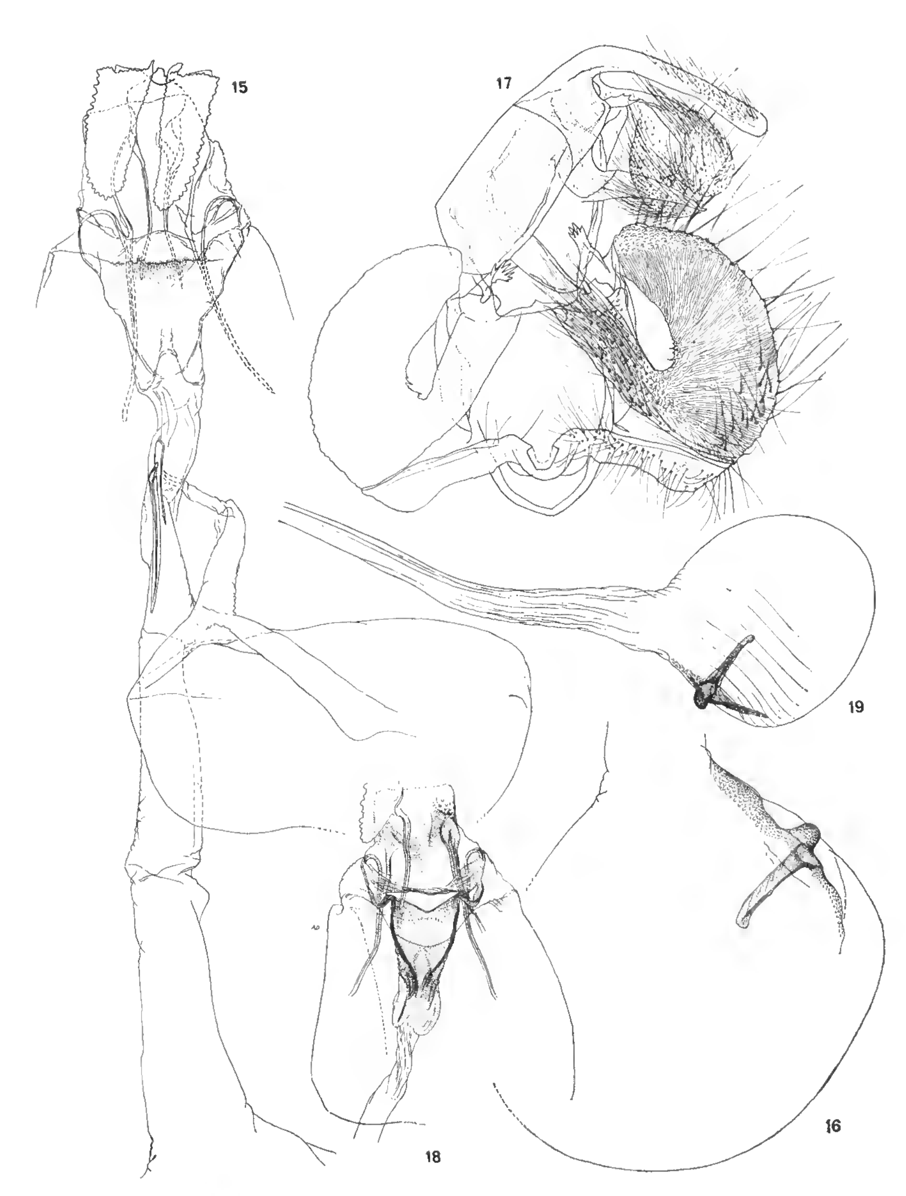


Fig. 15-19. — Genitalia of Madagascan Tortricinae. 15, *Goniotorna* (*G.*) *mucida* Diak., ♀, genit. slide 8343 ; 16, the same, bursa ; 17, the same, ♂, apallotype ; 18, *G.* (*Oestophyes*) *irresoluta* Diak., ♀, slide 8293 ; 19, the same, bursa.

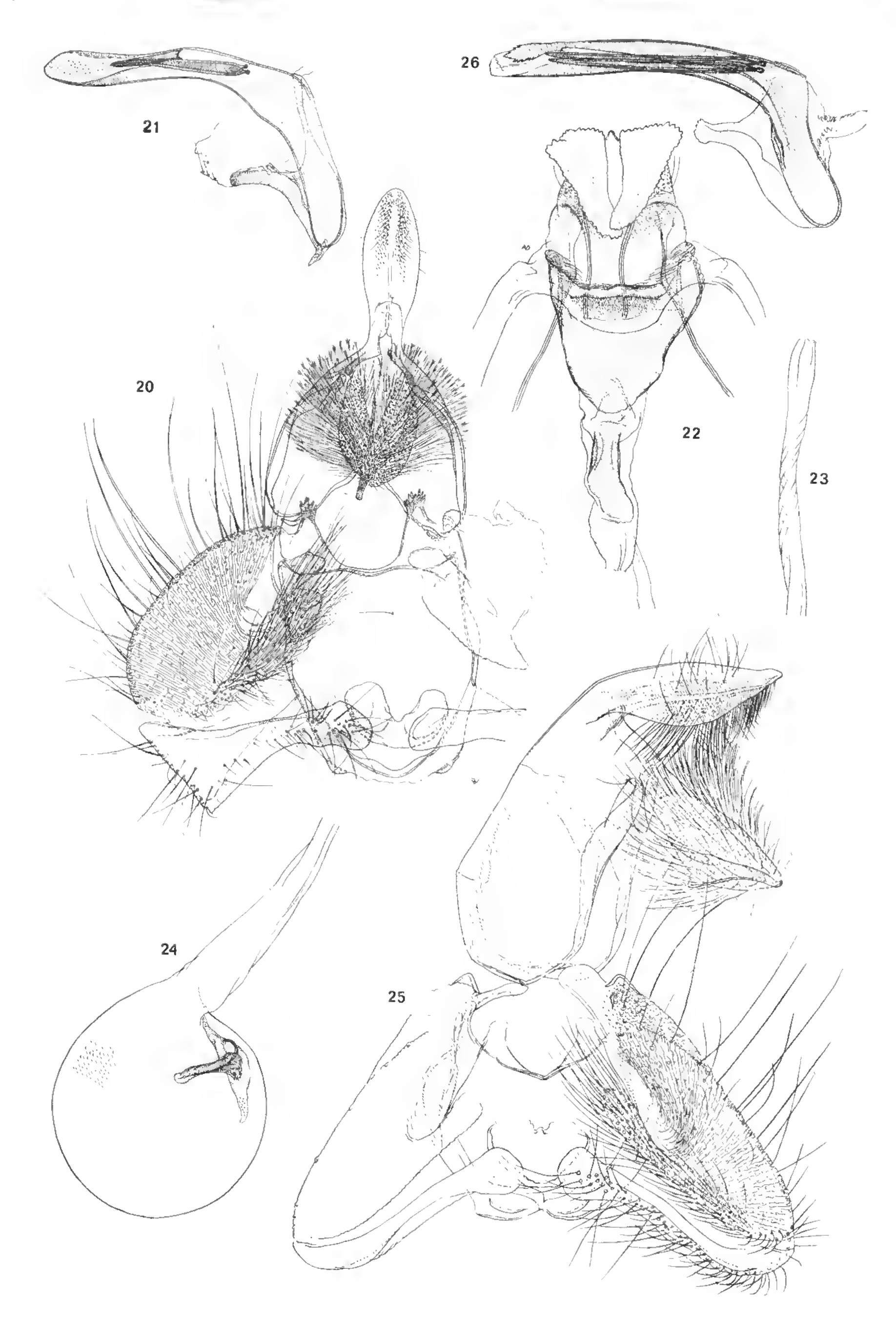


Fig. 20-26. — Genitalia of Madagasean Tortricinae. 20, *Goniotorna* (*G.*) *insatiata* sp. nov., ♂, holotype ; 21, the same, aedeagus ; 22, the same, ♀, allotype ; 23, the same, ductus bursae ; 24, the same, bursa ; 25, *G.* (*Oestophyes*) *irresoluta* Diak., ♂, genit. slide 8340 ; 26, the same, aedeagus.

the inner edge of the latter, being complete and well-defined, forms a good characteristic for the separation of this species from rather similar *G.* (*G.*) *mucida* Diak., where all the markings are more or less suffused, most edges being either incomplete or entirely obliterate.

The species appears variable because of the edges of the usual markings being either rather straight or more or less strongly undulate. So the edges of markings are tolerably straight in the type specimen (♂) from 840 m, and also in the type (♀) of *G.* (*O.*) *mesostena* Diak., also from low altitude (Périnet). Having been able to study a nice series of males and females now, I am satisfied that *mesostena* is the female of the present species and the name, a junior synonym. Some males and one female of Anjavidilava have the edges of markings almost as straight, but all the remaining specimens have them undulate to a variable extent. All specimens are rather darkly and distinctly marked, females darker than males.

Goniotorna (**Oestophyes**) **verticillata** Diak.

(Fig. 47-48)

Diakonoff, 1960 : 138, pl. 24, fig. 157, 157a, 157b, pl. 25, fig. 161-162.

Distribution. Central Madagascar : Ankaratra Range ; Andringitra Range.

Anjavidilava, 1 975-2 005 m, 19.xii.1970-15.i.1971 (*P. Griveaud*), 11 ♂, 21 ♀. Andringitra central, plateau d'Andohariana (Soaindrana), 2 030 m, 16-21.xi.1970 (*P. Viette*), 2 ♂.

Goniotorna (**Oestophyes**) **deinozona** sp. nov.

(Fig. 27-32)

♂ 19-20 mm. Head and palpus rather deep vinaceous-fulvous. Thorax deep vinaceous-brown, mixed with fuscous-grey, tip blackish. Abdomen tawny-vinaceous at base, towards apex becoming densely suffused with anthracite-grey.

Fore wing oblong, moderately broad, costa curved anteriorly, straight posteriorly, subobtuse, termen gently sinuate and vertical above, rounded beneath, fulvous-vinaceous-brown, moderately dusted and transversely strigulated with black, hardly so anteriorly, markings formed by black dusting. Basal patch over 1/4, hardly darker by very fine blackish suffusion and delicate transverse strigulation, stronger on costal edge ; edge of patch narrow, blackish, well-defined, acutely angulate above middle, rectangularly prominent on dorsum, emarginate just above angulation and prominence, respectively ; central fascia from before middle of costa, occupying about posterior third of dorsum, moderate as far as edge of cell, thence twice as broad, anterior edge rather straight ; this fascia slightly obscured by black above, becoming gradually darker downwards, lower half almost completely black ; anterior edge marked with a few single white scales ; costal patch replaced by fine transverse strigulation along posterior 2/5 of costa over about upper half of wing ; an oblique black suffused and spindle-shaped streak, resting on termen above tor-

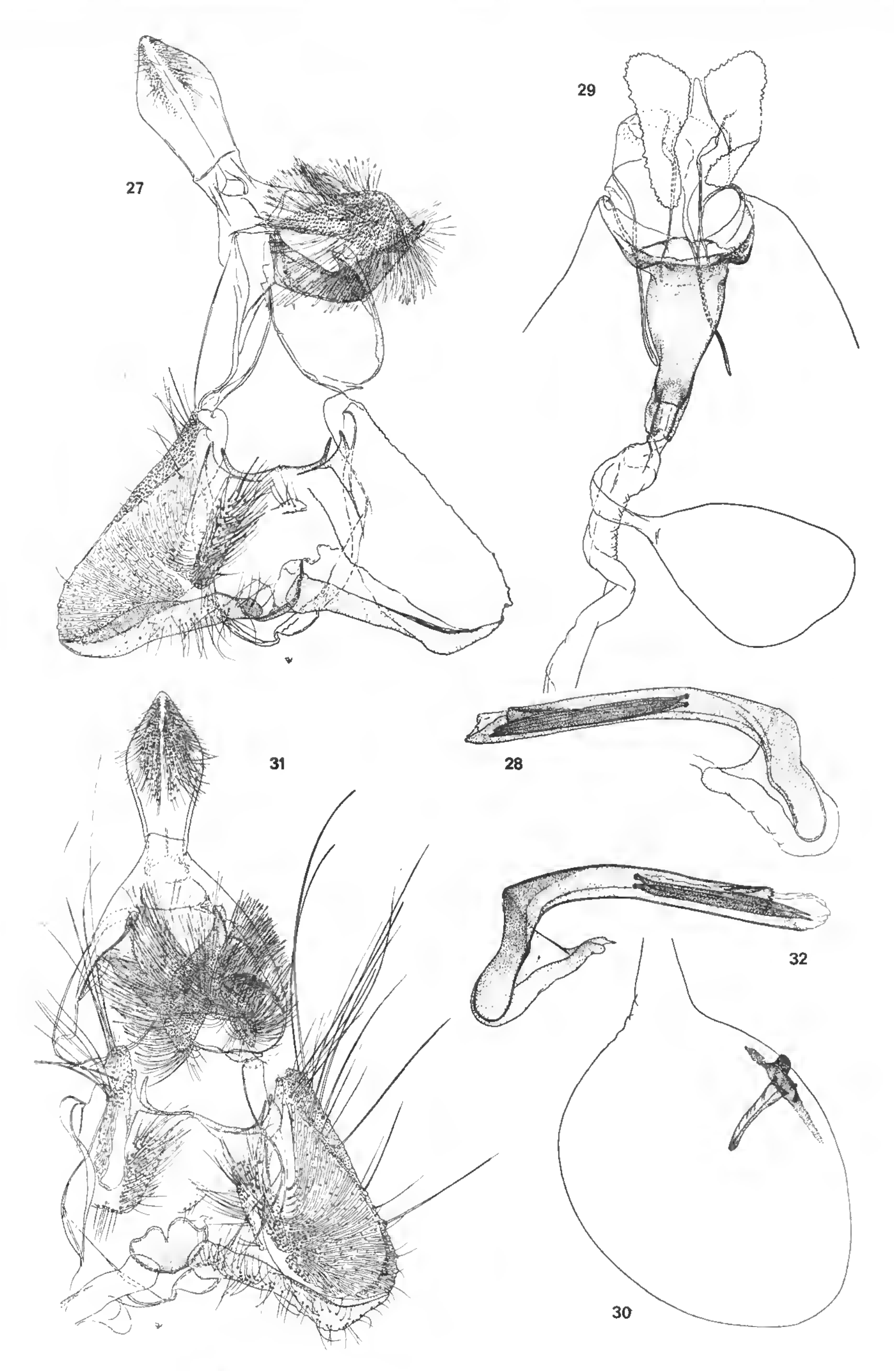


Fig. 27-32. — Genitalia of Madagascan Tortricinae. 27, *Goniotorna* (*Oestophyes*) *deinozona* sp. nov., ♂, paratype, genit. slide 8334 ; 28, the same, aedeagus ; 29, the same, ♀, allotype ; 30, the same, bursa ; 31, the same, ♂, holotype ; 32, the same, aedeagus.

nus, including some three minute white scales (and being lower part of edge of costal patch). Cilia concolorous, rather suffused with blackish.

Hind wing rather dark purplish-grey, with little gloss, cilia grey, more glossy, a pale basal and a grey subbasal lines.

♀ 21-22 mm. Deeper vinaceous-brown, stronger strigulated with blackish throughout, basal patch without notches nor dorsal prominence ; central fascia somewhat more slender ; posterior fascia replaced by a faint dark grey suffused band from 3/5 of costa to before lower third of termen ; white scales very few, spread, dark-edged. Hind wing slightly lighter and more glossy. Otherwise as male.

Male genitalia. Very similar to those of *G.* (*O.*) *verticillata* Diak., differing chiefly by the slender single-pointed and not dorsally dilated labis. Aedeagus less slender and shorter than in that species, with a subapical sclerotized fold of the upper side, with a finely serrate frontal edge.

Female genitalia. Allied to those in *verticillata* but quite distinct. Ostium broadly funnel-shaped and tolerably symmetrical, moderately narrowed along lower third only (in *verticillata* asymmetrical, strongly narrowed along lower half). Colliculum proper short, hyaline body surrounding it limited, less circular.

Anjavidilava, 1 975-1 990 m, 19-26.XII.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8530 ; 1 ♀, allotype, genit. slide 8333 ; 4 ♀, paratypes.

Madagascar Centre, ouest du Vohidray, Ambalamarovandana, 1 530 m, 16-21.I.1971 (*P. Griveaud*), 1 ♂, paratype, genit. slide 8534.

A deep vinaceous-brown species with well defined blackish central fascia. Judging from the male genitalia, also close to *G.* (*O.*) *benevolens* Diak., from Périnet, but with different labis and completely different markings.

Goniotorna (**Oestophyes**) **vulpicolor** Diak.

DIAKONOFF, 1960 : 144, pl. 26, fig. 172-173 (♀).

DISTRIBUTION. East Madagascar : Sambava district, Marojejy Range, 2 030 m.

Anjavidilava, 19-30.XII.1970, 1 975-1 990 m (*P. Griveaud*), 3 ♀, genit. slides 8500, 8501, 8502.

The female genitalia have a very characteristic long-erected ostium, removing the species far from its congeners. Lamella postvaginalis in the present series is less strongly constricted at each side of the ostium than in the type, but otherwise the genitalia are identical.

The species has a remarkable and puzzling similarity with the female of *Metamesia mianta* sp. nov., perhaps owing to mimicry.

Goniotorna (Goniotorna) mucida Diak.
(Fig. 15-17)

Goniotorna (Oestophyes) mucida diakonoff, 1960 : 142, pl. 27, fig. 178-179. — 1970 : 117.

DISTRIBUTION. Central Madagascar : Ankaratra Range. North Madagascar : Tsaratanana Range.

Anjavidilava, 1 975-2 005 m, 19.XII.1970-15.I.1971 (*P. Griveaud*), 1 ♂, apallotype, genit. slide 8342 ; 14 ♂, 2 ♀, genit. slides ♂ 8344, 8516, ♀ 8343, 8526.

Having studied a long series of males of this species, I am satisfied that it belongs to the subgenus *Goniotorna* Meyr. and not to *Oestophyes* Diak.

♂ 17-20 mm, apallotype. Head pale grey, palpus pale grey rather mixed with dark grey, base of median segment tawny. Thorax light purplish mixed with darker. Abdomen pale ochreous, grey-whitish with a golden gloss, anal tuft somewhat deeper ochreous-grey.

Fore wing oblong-suboval, moderately broad, costa arched throughout appearing almost straight before apex, apex rectangular, slightly obtuse, termen vertical and gently concave above, broadly rounded beneath. Pale tawny-fulvous, towards base suffused with deeper fulvous, moderately and rather regularly strewn with slender black transverse strigulae, oblique on anterior half of wing, on posterior becoming sparse series of black points, parallel to posterior edge of central fascia and in some three broad curves below apex and before termen. Basal patch indefinite, suffused with ferruginous-fulvous, little darker ; central fascia well-defined, blackish and rather narrow along upper third, from costa before middle to 3/4 of dorsum, on lower 2/3 much dilated by a dark brown suffusion, extending anteriorly along median third of fascia, posteriorly broadly rounded and prominent along lower 2/3, but not reaching tornus ; costal patch indicated by some four suffused black dots in a semioval, a fifth dot in middle and marginal ; this patch slightly filled out with blackish. Cilia pale tawny.

Hind wing pale ochreous, except along costa, suffused with pale fuscous-tawny, cilia pale ochreous.

Male genitalia. Resembling those of *G.* (*G.*) *chersopis* Meyr. most, but with less rounded valva, more slender (although slightly variable) labis, and the aedeagus with a subapical spike at the left side of upper edge.

The species is considerably variable, paler or darker, with conspicuous or almost entirely obliterate central fascia. However, the shape of fascia (when present) and general colouring remain constant. This, together with the short-spiked aedeagus, rather narrow and simple sacculus (as depicted) and, of course, the normal male hind wing, allow of an easy separation from (apparently much more rare) *G.* (*G.*) *chersopis*.

Goniotorna (**Goniotorna**) **micrognatha** Diak.

Diakonoff, 1960 : 147, pl. 27, fig. 176-177, pl. 28, fig. 186-187, pl. 30, fig. 196. — 1963 : 136.

Distribution. East Madagascar : Périnet ; Ambatondrazaka. Central Madagascar : Manjakandriana ; Betsileo Country, Ankazomivady. Southeast Madagascar : Andohahelo Range. North Madagascar : Montagne d'Ambre.

Anjavidilava, 1 990 m, 2 005 m (*P. Griveaud*), 5 ♂, genit. slides 8345, 8349, 8350 and 8470.

Manjarivolo (*P. Viette*), 1 ♂, genit. slide 8348.

Madagascar Centre, forêt Vakoana, Ambalamarovandana, 1 530 m, Andringitra-Ambalavao, 21.i.1958 (*P. Griveaud*), 1 ♂, genit. slide 8462.

Goniotorna (**Goniotorna**) **megalogonia** Diak.

Diakonoff, 1960 : 150, pl. 28, fig. 184-185, pl. 30, fig. 197-198.

Distribution. East Madagascar : Périnet ; Nosivola ; Ambatondrazaka ; 900-1 000 m ; Marojejy Range, 2 030 m.

Anjavidilava, 1 975-2 005 m, 19.xii.1970-15.i.1971 (*P. Griveaud*), 4 ♂.

Goniotorna (**Goniotorna**) **insatiata** sp. nov.
(Fig. 20-24)

♂ 17.5 mm. Head and face densely scaled, dark grey slightly mixed with paler purplish. Palpus purple, finely and closely dusted black. Thorax deep purple, apex fuscous-whitish. Abdomen pale ochreous-fuscous, strewn with black. Posterior tibia pale grey, densely scaled with long soft appressed scales, especially above.

Fore wing suboval, costa oblique but moderately arched to beyond middle and with short, erected (and not rolled) costal edge (fold) from well beyond middle, straight before apex, apex obtusely angular, termen short, straight and vertical above, rounded below. Light ochreous, paler anteriorly but almost entirely obscured with transverse strigulation and suffusion. Basal patch over 1/3, densely suffused with black, not reaching below vein 18, edge traceable, rather straight, with a triangular prominence in cell ; central fascia dark grey, edges suffused black and tolerably parallel as far as cell ; in and below cell fascia strongly projecting posteriorly to before tornus, its edge almost horizontal above, vertical and slightly concave posteriorly, below reaching tornus ; this fascia rather suffused with ferruginous, veins faintly suffused with black, edges deep ferruginous ; anterior edge of cell with a large angulation just above middle, moderately concave above and below this ; space between basal patch and fascia on costal third suffused grey, below pale with

three undulate black slightly inwards-oblique parting lines ; costal patch regularly semi-oval, rather narrow, purplish, grey and ferruginous, with four black costal spots and ferruginous marks along lower edge ; light ochreous ground colour so forming well defined curved streak from 2/3 of costa to apex and a broader vertical blotch along termen, the latter including a submarginal dark purple patch of marbling and narrow lines along veins. Cilia pale ochreous-grey, basal third light ochreous with grey bars.

Hind wing moderately broad, sub-semioval, termen oblique, little prominent in middle, dorsum with a triangular, not tightly rolled lobe, with posterior edge and inside pale grey ; upper side of wing dull, rather deep fuscous-grey, strewn with small jet-black scales ; a long pencil of fuscous-grey hairs from base not quite reaching tornus, paler at base. Cilia glossy pale whitish-grey, with a pale basal and a slender grey subbasal line.

Male genitalia. Nearest to those of *G.* (*G.*) *chersopis* Meyr. (fig. 49-50) differing as follows. Valva semioval, less spheroid ; sacculus sclerotized throughout, strongly angularly projecting and apparently flat, posterior edge of projection entirely straight (concave in all other species). Aedeagus with a large spike well before top of upper edge. Labis more slender.

Madagascar Centre, ouest du Vohidray, (Andringitra), Ambalamarovandana, 1 530 m, 16-21.xi.1971 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8529 ; 1 ♂, paratype ; 1 ♀, allotype, genit. slide 8536.

♀ 19 mm. Similar to the male, but with narrower fore wing. Basal patch with edge indicated, angulate in middle, with a dark fuscous median spot just above fold at 1/3 of wing ; central fascia suffused on lower half, posterior edge rather well defined, accentuated by a very oblique and strongly convex continuous series of dark points, a dark fuscous spot on 3/4 of dorsum ; preterminal dark markings absent, except a conspicuous curved series of dark dots from top of costal patch, paralled to edge of central fascia to tornus.

Hind wing bronze-fuscous, not black-dusted and therefore much lighter. Cilia pale grey with a darker submedian band.

Female genitalia. Ostium bursae widely triangular, with sides gently convex, point moderately rounded, conus of colliculum small, colliculum proper slender and tubular, open frontally, gently dilated downwards, preceded by a rather wide hyaline dilatation of ductus, colliculum with thick refracting walls. Corpus bursae rather small, signum of normal shape.

A puzzling species, closely resembling *G.* (*G.*) *megalogonia* but smaller, and by closer study differing also superficially by long-haired posterior tibiae (in *megalogonia* short-haired, in *chersopis* normal), by black scales over hind wing and abdomen (absent in *chersopis*) and by different tornal lobe which is triangular and shorter, not oblong and projecting posteriorly beyond tornus, as in *megalogonia*.

The subapical spike of the aedeagus is smaller in *chersopis* and actually is absent (or not traceable) in the lectotype of that species (fig. 49-50), contrary to my original description of the genitalia (1959) ; however, a small spike is present in another syntype.

Goniotorna (Goniotorna) erratica (Diak.)

Syndemis erratica Diakonoff, 1947 : 24 fig. 3-4. — Viette, 1947 : 56.
Goniotorna (*G.*) *erratica* : Diakonoff, 1960 : 150, fig. 77, pl. 28, fig. 188-189. — 1963 : 136. — 1970 : 117.

Distribution. Central Madagascar : Tsimbazaza park. East Madagascar : Manakambahiny Est ; Marojejy Range. North Madagascar : Tsaratanana Range.

Anjavidilava, 1 975 m, 1 990 m (*P. Griveaud*), 4 ♂.

Goniotorna (Tenuisaccula) rhodolemma Diak.

Diakonoff, 1960 : 154, pl. 29, fig. 192, pl. 30, fig. 199-200.

Distribution. Central Madagascar : Ankasoka ; Andringitra Range, Anjavidilava, 2 030 m.

Anjavidilava, 1 975, 1 990 and 2 005 m (*P. Griveaud*), 3 ♂, 1 ♀.
Manjarivolo (*P. Viette*), 1 ♀.

Goniotorna (Tenuisaccula) polyops Diak.

Diakonoff, 1960 : 159, pl. 27, fig. 180-181, pl. 31, fig. 203.

Distribution. East Madagascar : Sandrangato forest. Central Madagascar : Andringitra Range, Anjavidilava, 2 030 m, 19.i.1958 ; Ampitameloka, Moramanga ; Sambava district, Marojejy Range.

Andringitra centre, plateau d'Andohariana (Soaindrana) 2 030 m, 10-21.xi.1970 (*P. Viette*), 1 ♀, genit. slide 8291.

Goniotorna (Tenuisaccula) mianta sp. nov.
(Fig. 33-36)

♂ 16 mm, ♀ 16.5-18.5 mm. Head light tawny, face whitish. Palpus light tawny. Thorax light tawny, glossy. Abdomen pale fuscous.

Fore wing moderately broad, costa curved throughout, apex pointed and slightly produced, termen sinuate, moderately oblique. Glossy pale ochreous-tawny, markings more or less suffused, brown to dark brown. Basal patch to 1/4, only costal half as far as fold developed, blackish-brown, edge well-defined, oblique and gently concave, lower edge moderately suffused ; central fascia from well before middle, rather narrow, hardly dilated, oblique and gently excurved (concave posteriorly), limited below by lower edge



Fig. 33-38. — Genitalia of Madagascan Tortricinae. 33, *Goniotorna* (*Tenuisaccula*) *mianta* sp. nov., ♂, holotype ; 34, the same, aedeagus ; 35, the same, ♀, allotype ; 36, the same, bursa ; 37, *Acleris phanerocrypta* sp. nov., holotype ; 38, the same, aedeagus, with juxta.

of fold ; dark brown, edges faintly suffused with blackish-brown ; costal patch narrow and oblong, gradually narrowed posteriorly, ends rounded : from before 2/3 to well before angle, light brown ; a darker brown, well-defined preterminal fascia, from angle to dorsum before tornus, gently extended along dorsum (thus indicating base of central fascia), posterior edge distinctly concave and finely serrulate, anterior edge triangularly prominent above middle, elsewhere somewhat irregular ; a dark brown dot on lower angle of cell and a paler brown suffused line, parting space between central fascia and costal patch, strongly sinuate and merging in suffusion around foot of preterminal fascia. Cilia whitish or pale tawny, a brownish suffused bar apposite apex.

Hind wing pale fuscous-greyish, tinged tawny towards apex, finely strewn with sparse black scales over basal third. Cilia glossy pale ochreous.

Male genitalia. Resembling those of *G.* (*T.*) *leucophrys* Diak., but very distinct. Uncus more elongate, spoon-shaped ; transtilla with labides very robust. Valva semicircular, higher than in other species, sacculus more rounded along lower edge, sclerotized throughout, its upper edge forming a smooth sclerite, oblong-crescentic. Aedeagus sclerotized, with a longitudinal split, subapical thorn small, straight, not upcurved.

Andringitra oriental, forêt d'Anjavidilava, 1 975 m, 26-30.xii.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8467. Superficially resembling a *Metamesia* species.

Goniotorna (Tenuisaccula) chondrocentra sp. nov.
(Fig. 41-42)

♂ 18 mm. Head and palpus light tawny. Thorax whitish-grey, glossy, anterior fourth light tawny. Abdomen glossy fuscous-grey.

Fore wing oblong-suboval, costa curved throughout, apex tolerably pointed, termen very gently sinuate, hardly oblique above, rounded below. Glossy rather light grey-fuscous. Basal patch hardly to 1/4, slightly darker infuscated, edge marked with blackish dots, with an acute prominence just above middle, otherwise almost straight and vertical, preceded by a submarginal black parallel and straight line ; central fascia indicated by an oblique dark grey band from before middle of costa to upper edge of cell, edges slightly marked with purplish small dots ; lower half of fascia hardly traceable, purplish ; three purple black dots among middle of edge of basal patch, a suboblong larger spot beyond middle of cell and a curved row of purple-black points from 3/5 of costa to tornus ; another series of smaller dots below apex and before termen ; three larger dots on central fascia below costa ; a row of suffused grey blotches along dorsum. Cilia light purple-fuscous with a white basal line.

Hind wing glossy pale grey, apex slightly darker and with finest grey dotting. Cilia concolorous.

Male genitalia. Resembling those of *G.* (*T.*) *rhodoptila* Diak., but with uncus elongate and pointed, tegumen broader at base, gnathos very densely black-scaled (or spined).

Madagascar Centre, Andringitra méridional, chaîne de l'Andrianony, cirque de Manjarivolo, 1 650 m, 26 x.-4.xi.1970 (*P. Viette*), 1 ♂, holotype, genit. slide 8288 ; 1 ♂, paratype, genit. slide 8331.

Distinct by greyish general appearance and dark discal dots ; the paratype is much paler, but the dots are similar, only more contrasting.

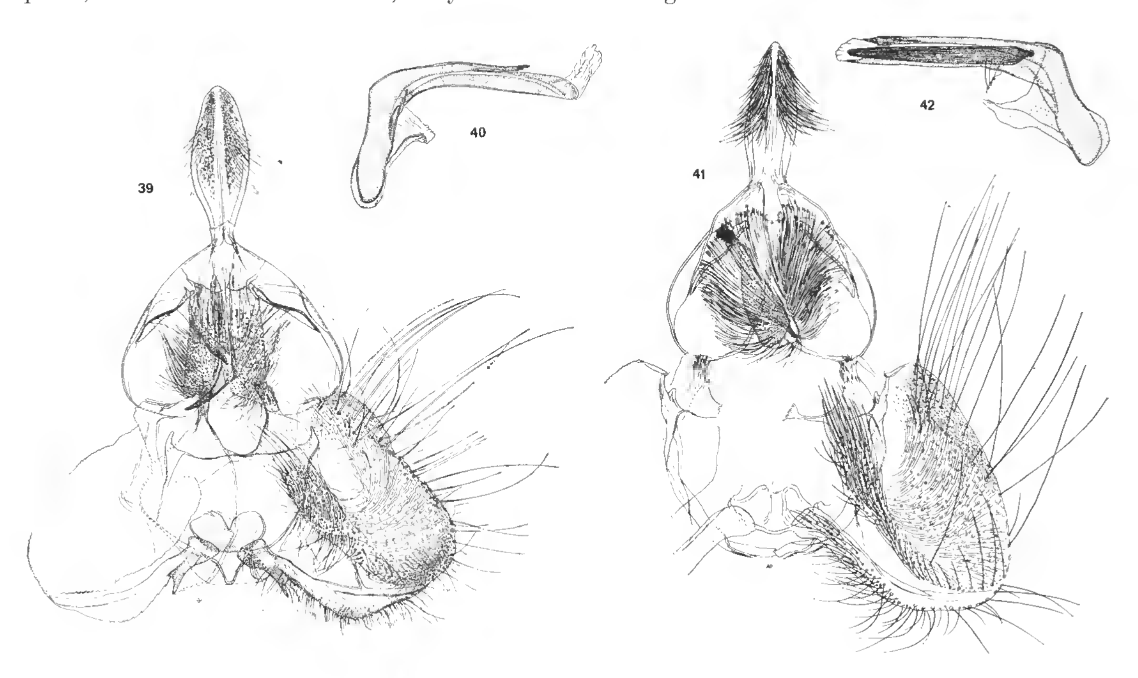


FIG. 39-42. — Male genitalia of Madagascan Tortricinae. 39, *Goniotorna* (*Tenuisaccula*) *trignoma* sp. nov., holotype ; 40, the same, aedeagus ; 41, *G.* (*T.*) *chondrocentra* sp. nov., holotype ; 42, the same, aedeagus.

Goniotorna (**Tenuisaccula**) **trignoma** sp. nov.
(Fig. 39-40)

♂ 16 mm. Head white, scape of antenna ferruginous. Antenna ferruginous. Palpus fulvous, at base becoming whitish. Thorax ferruginous mixed with whitish, tip white (imperfect). Abdomen pale ochreous-fuscous, anal tuft fuscous, very large.

Fore wing oblong-truncate, costa arched at base, straight posteriorly, apex subobtuse, termen almost straight, hardly sinuate, little oblique. Very pale ochreous, with a strong silky gloss, sparsely sprinkled with fulvous, markings brown. A dark brown oval spot along basal 1/5 of costa, hardly reaching below base of fold ; central fascia formed by a rather slender well-defined oblique streak from middle of costa to lower edge of cell, light brown, edges dotted and lower third suffused with dark brown ; anterior edge straight, posterior moderately concave, top truncate by cell edge ; lower half of fascia extremely faint, appa-

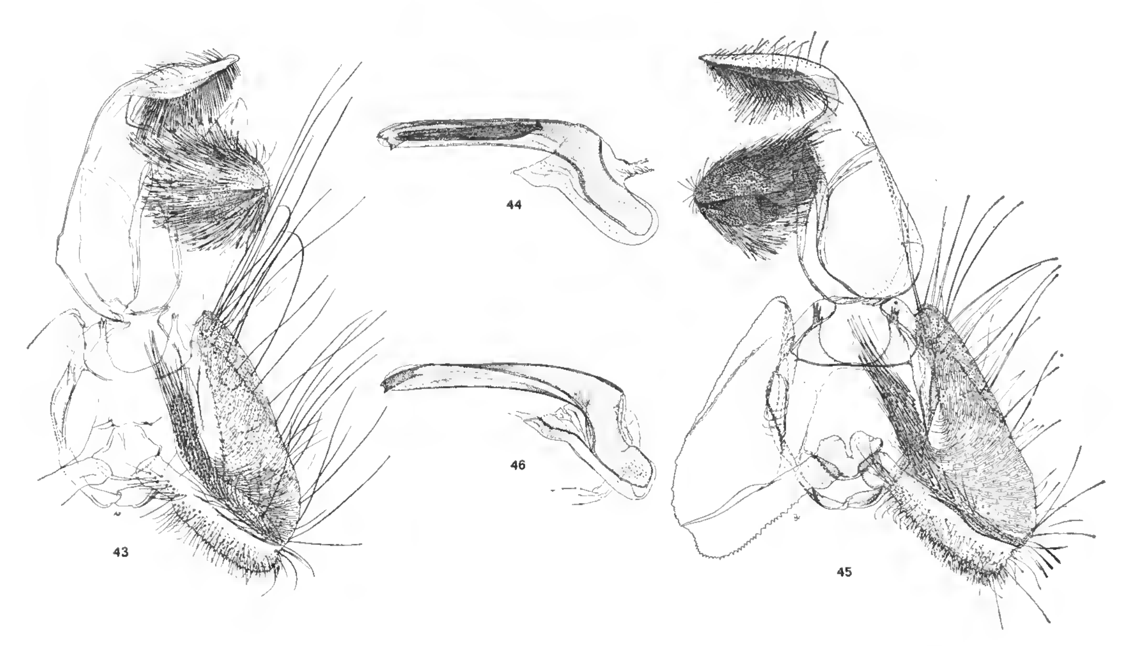


Fig. 43-46. — Male genitalia of Madagascan Tortricinae. 43, *Goniotorna* (*Oestophyes*) *trigodes* sp. nov., paratype, genit. slide 8290 ; 44, the same, aedeagus ; 45, the same, holotype ; 46, the same, aedeagus.

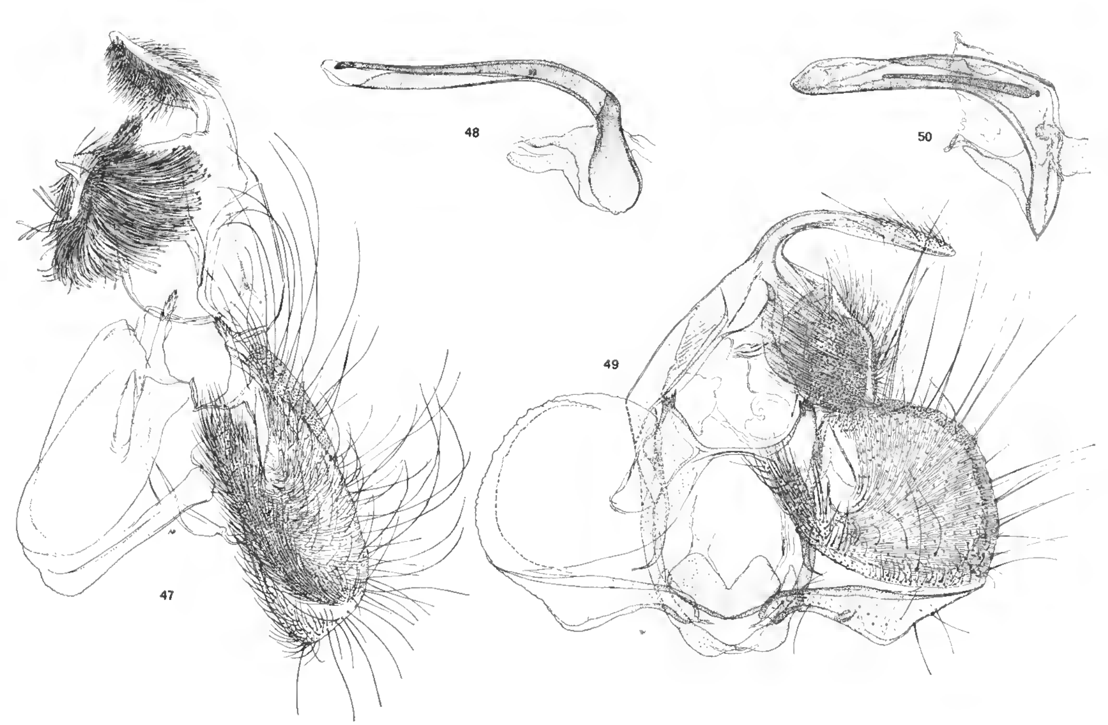


Fig. 47-50. — Male genitalia of Madagascan Tortricinae. 47, *Goniotorna* (*Oestophyes*) *verticillata* Diak., genit. slide 5286 ; 48, the same, aedeagus ; 49, *G.* (*G.*) *chersopis* Meyr., lectotype ; 50, the same, aedeagus.

rently dilated and less oblique, costal patch oblong-semioval, rather narrow, edges and two oblique transverse lines darker brown; some irregular transverse blackish dotting before termen, in right wing forming two parallel lines, below apex and above tornus, respectively; terminal edge with minute blackish interneural marginal marks. Cilia concolorous.

Hind wing evenly pale ochreous-fuscous, less glossy. Cilia paler.

Male genitalia. Nearest to those of *G.* (*T.*) *rhodolemma* Diak., but very distinct by an acute spike at the base of sacculus; besides, by a more narrow, spindle-shaped uncus and a longer, entirely spiny labis; valva with regard to the shape, nearest to that in *G.* (*T.*) *rhodoptila* Diak., but shorter, with a rounded bulge of the costa, but differing at once by the spike of the sacculus.

Females lacking.

Madagascar Centre, Andringitra oriental, forêt d'Anjavidilava, 1 975 m, 26-30.xii.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8523. A slender species with quite distinct and characteristic markings.

Goniotorna (**Serruligera**) **melanoconis** Diak.

Diakonoff, 1960 : 164, pl. 33, fig. 214-216. — 1970 : 119.

Distribution. Central Madagascar : Betsileo Country, Ambatofitorahana forest. East Madagascar : Analamazoatra forest; Manakambahiny Est. North Madagascar : Montagne d'Ambre.

Anjavidilava, 1 990 m, 2 005 m (*P. Griveaud*), 11 ♂.
Manjarivolo (*P. Viette*), 1 ♂.
Madagascar Centre, ouest du Vohidray (Andringitra), Ambalamarovandana, 1 530 m, 16-21.i.1971 (*P. Griveaud*), 1 ♀.

Epichoristodes (**Epichoristodes**) **canonicum** sp. nov.
(Fig. 51-52)

♂ 21-24 mm. Head light ochreous-fulvous, face paler. Palpus light fulvous, pale ochreous inside. Thorax light fulvous, pale ochreous on posterior half, tegulae suffused with tawny. Abdomen pale ochreous.

Fore wing oblong-truncate, broad, little dilated, costa strongly arched anteriorly, straight posteriorly, apex moderately pointed, slightly prominent, termen sinuate above, rounded-prominent below, vertical. Glossy pale ochreous, strewn with fine transverse ferruginous strigulae, tending to form a reticulation before termen. Markings deep ferruginous, with suffused dark brown edges, well-defined. Basal patch extending on costa slightly less than 1/5, on dorsum to before middle, light ochreous, with dark obliterate reticulation, below fold deep ferruginous-brown with dark brown reticulation; extreme base suffused

dark brown, costa with three triangular dots, posterior largest and marginal ; edge of patch from this spot, concave and strongly oblique, with a subobtuse projection in middle, filled out with dark ferruginous-brown, edge below fold deeply emarginate ; central fascia rather narrow, constricted above middle, from 1/3 of costa to 2/3 of dorsum, upper half wedge-shaped ; anterior edge of fascia well-defined, three times scalloped, posterior edge along lower 2/3 suffused and notched twice, extending along posterior 1/3 of dorsum to tornus and becoming paler and greyish there ; costal patch at 3/5, moderate, subquadrate, gently oblique, lower angles rounded ; followed by two marginal round dots, anterior with its lower edge connected by a small bar with patch ; an orange small suffusion on dorsal lobe ; a similar suffusion, paler and narrower, along posterior third of cell above its middle ; a suffused ferruginous apical spot, extending over cilia. Cilia ferruginous in apex and along lower 1/3 of termen, ochreous elsewhere, with a faint dark brown basal band, dissolved into dark bars opposite ends of veins, towards and in tornus, bar on end of dorsum large and distinct.

Hind wing pale golden-ochreous with a silky gloss, a trifle deeper ochreous posteriorly. Cilia concolorous, around apex and along upper third of termen suffused vinaceous.

Male genitalia. Very similar to those of *E.* (*E.*) *leucocymba* Diak., but with a narrower valva, a less sclerotized sacculus which is not dilated in middle and a less prominent pulvinus.

Female unknown.

Andringitra oriental, forêt d'Anjavidilava, 1 990 m, 19-25.XII.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8268 ; the same, 1 975 m, 26-30.XII.1970 (*P. Griveaud*) ; the same, 2 000 m, 2-5.XII.1970 (*P. Soga*) and 1-15.I.1971 (*P. Griveaud*).

Andringitra méridional, chaîne de l'Andrianony, cirque de Manjarivolo, 1 650 m, 26.X-4.XI.1970 (*P. Viette*).

Holotype and 7 ♂ paratypes altogether.

A very distinct species with the usual Archipine markings. The genitalia, however, resemble those of the quite differently marked *E. leucocymba* closely.

Belongs to the group of *E.* (*E.*) *goniopa* Diak. and *macrosema* Diak., differing from the former by the sacculus rounded and not prominent beyond base, and by the top of valva more obtusely rounded and the aedeagus similar, but distinctly shorter ; and separated from *macrosema* at once by the dilated aedeagus of the latter species.

Epichoristodes (**Epichoristodes**) **atricaput** sp. nov.

(Fig. 55-56)

♀ 17.5 mm. Head, palpus and collar deep ferruginous. Thorax light tawny-fulvous, glossy, anterior edge, shoulder and basal half of tegula deep ferruginous. Abdomen pale golden-ochreous, venter tawny-ochreous with a crimson iridescence.

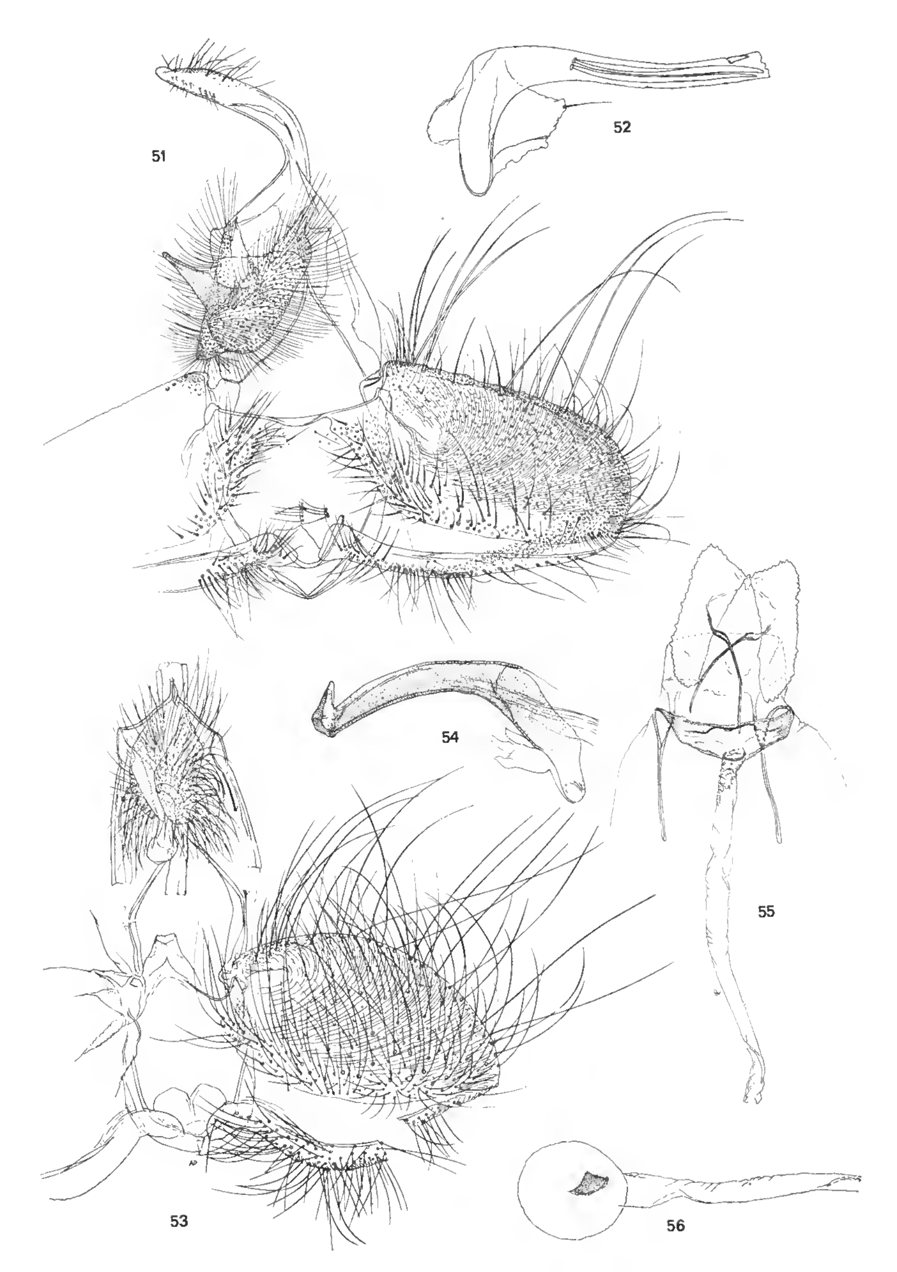


Fig. 51-56. — Genitalia of Madagascan Tortricinae. 51, *Epichoristodes* (*E.*) *canonica* sp. nov., ♂, holotype ; 52, the same, aedeagus ; 53, *Gephyraspis insolita* sp. nov., ♂, holotype ; 54, the same, aedeagus ; 55, *E.* (*E.*) *atricaput* sp. nov., ♀, holotype ; 56, the same, bursa.

Fore wing oblong-truncate, costa arched at base, straight posteriorly, moderately but distinctly prominent at 3/4, apex obtuse-rectangular, termen gently concave, vertical above, rounded beneath. Pale fulvous with a strong whitish gloss, densely strigulated with transverse, broadly undulate, partly interrupted, orangeish-fulvous, very dull lines of diverse width. Markings of the same colour, very dull. Anterior fourth of costal edge pale orange, a small basal spot deep ferruginous ; central fascia indicated by a moderate subtriangular patch, continued to dorsum well beyond middle by a single stria, gradually concave and narrowly edged with glossy ground colour anteriorly, irregular posteriorly ; costal patch large, from beyond middle of costa to well before apex, semioval, below connected with transverse striae and including a couple of small spots of glossy ground colour ; costa posteriorly orangeish-fulvous, dull ; transverse strigulation reduced along and below basal fourth of costa, less distinctly around costal patch and on terminal fourth of wing ; the latter fourth with some three almost vertical thicker straight transverse striae, posterior marginal, these striae irregular in right wing. Cilia dull orangeish-fulvous, with deep ferruginous apical third.

Hind wing fulvous-orange, deeper coloured and tinged pinkish posteriorly, along costa pale ochreous. Cilia concolorous.

Female genitalia. Sterigma little sclerotized, transversely oblong, lamella postvaginalis in middle, narrow at the sides ; lamella antevaginalis little extended, irregularly sub-linear. Colliculum membraneous, strongly wrinkled. Ductus bursae very long and narrow, straight. Corpus bursae almost spherical. Signum rhomboidal, with serrulate edge.

Madagascar Centre, Andringitra méridional, chaîne de l'Andrianony, cirque de Manjarivolo, 1 650 m, 26.x-4.xi.1970 (*P. Viette*), 1 ♀, holotype, genit. slide 8284.

A conspicuous insect with distinct but rather not instructive genitalia. The actual position of the present species is somewhat puzzling without the evidence of male genital characters.

Epichoristodes (**Epichoristodes**) **apileticum** Diak.

Diakonoff, 1960 : 170, pl. 33, fig. 217-219, pl. 35, fig. 227-228. — 1961 : 155. — 1970 : 120.

Distribution. Central Madagascar : Betsileo country ; Ankaratra Range. North Madagascar : Tsaratanana Range. East Madagascar : Ampitameloka.

Manjarivolo (*P. Viette*), 1 ♂.
Anjavidilava, 1 975 m, 1 990 m (*P. Griveaud*), 3 ♂, 1 ♀.

Epichoristodes (**Epichoristodes**) **ypsilon** Diak.

Diakonoff, 1960 : 173, pl. 34, fig. 220-221.

Distribution. Manjakandriana.
Anjavidilava, 2 005 m, 1-15.i.1971 (*P. Griveaud*), 1 ♂.

Epichoristodes (Tubula) incertum Diak.

Diakonoff, 1960 : 171, pl. 34, fig. 224, 224a (*incerta*).
Epichoristodes (*Tubula*) *nervosum* Diakonoff, 1970 : 120, pl. 10, fig. 1-2 (♀). Syn. nov.

Distribution. Northeast Madagascar : Marojejy Range. Central Madagascar : Ankaratra Range, 1 850-2 030 m ; Andringitra Range, Anjavidilava. North Madagascar : Tsaratanana Range, 1 900-2 050 m.

Andringitra central, plateau d'Andohariana (Soaindrana), 2 030 m, 10-21.xi.1970 (*P. Viette*), 1 ♀.

Anjavidilava, 1 975-2 005 m, 19.xii.1970-15.i.1971 (*P. Griveaud*), 11 ♂, 11 ♀, genit. slides ♂ 8330, ♀ 8269, 8285.

Manjarivolo (*P. Viette*), 3 ♂, 5 ♀, genit. slide 8468 ♂.

Having been able to study a nice series of males and females I am satisfied that " *nervosum* ", described after a single specimen, is but the female sex of the present species, which should be referred to subgenus *Tubula*, as is now proven by the female genitalia.

Gephyraspis insolita sp. nov.
(Fig. 53-54)

♂ 21 mm. Head pale yellow. Palpus light tawny, base pale yellow, edge of this colour oblique. Thorax pale yellow, apex fuscous-tawny. Abdomen and anal tuft white, upper half suffused with blackish.

Fore wing oval, costa strongly curved anteriorly, and with a short upright and open fold obtusely rectangular, termen straight, vertical above, rounded beneath. Light tawny, evenly and almost entirely infuscated ; very faint fuscous-grey darker shadowy streaks obliquely across wing, from below costa at 1/4 and before middle, respectively (the second streak apparently indicating central fascia) ; costa with a rather well-defined pale yellow streak from end of costal fold to apex, including 3-4 distant black points ; tornal area as far as cell suffused orange-tawny and on posterior half darker infuscated. Cilia dark fuscous.

Hind wing rather dark purple-fuscous with an indefinite reddish-vinaceous tinge, edge clouded with dark fuscous ; dorsum strewn with dense dark fuscous scales. Cilia fuscous-grey with a dark fuscous-grey subbasal shade (inperfect).

Male genitalia. Very similar to those of *G. lutescens* Diak. but differing by the shape of the median process of the transtilla (broken at base, but present in mount) ; with an inverted-Y-shaped (instead of inverted-T-shaped) base and a fuscate top. Valva decidedly broader, aedeagus obliquely hooked at top.

Females lacking.

Anjavidilava, 2 005 m, 1-15.i.1971 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8281.

Rather similar to the type-species, but with an elementary costal fold, generally paler and with dorsum not darker suffused. Hind wing darker brownish. The transtilla and the aedeagus are so different that there seems to be no doubt of the species being distinct.

Gephyraspis contranota sp. nov.
(Fig. 66-68)

♀ 21 mm. Head creamy-white. Palpus long, light ochreous-golden, tip of median and entire terminal segment brownish. Collar creamy-white. Thorax pale tawny. Abdomen fuscous-ochreous.

Fore wing oblong, moderately broad, costa curved anteriorly, sinuate posteriorly, apex moderately pointed, slightly produced, termen sinuate, little oblique. Pale ochreous-tawny, strewn all over with short jet-black strigulae and dots. Basal patch to 1/6, suffused light tawny-greyish, edge narrowly blackish, patch reaching halfway across wing ; this patch followed on costa by three narrow, interrupted lines ; central fascia broken in two, costal part narrow, oblique, blackish, turning grey downwards, interrupted by cell, from beyond 1/3 of costa ; lower half of fascia forming an obliquely oval large patch on end of dorsum, chestnut-brown, mixed with black on lower half ; some light brown suffusion extending along dorsum below fold, not reaching base ; costal patch elongate-triangular rather narrowly depressed, equilateral, brownish, closely strewn with black. Cilia (imperfect) brown.

Hind wing and cilia pale ochreous with a golden gloss, apex dotted with dark grey.

Female genitalia. Lobi anales finely granulate and shortly haired. Ninth sternite sclerotized and compressed laterally, dorso-ventral diameter being largest. Lamella postvaginalis, a brace-shaped, strong edge, in middle slightly rising, lateral angles long and pending ; lamella antevaginalis, a simple, slender edge, angulate in middle. Colliculum wide, funnel-shaped, asymmetrical, constricted above end. Ductus bursae long and slender. Corpus bursae small, spherical. Signum, a single granulate cusp.

Madagascar Centre, Andringitra oriental, forêt d'Anjavidilava, 2 005 m, 1-15.I.1971 (*P. Griveaud*), 1 ♀, holotype, genit. slide 8339 ; 1990 m, 19-25.XII.1970 (*P. Griveaud*), 1 ♂, paratype, slide 8581.

A distinctly marked species, but the position is uncertain without males. The paratype is very pale, with all markings present but faded to a pale grey.

DORIDOSTOMA gen. nov.

Head with dense, closely appressed scales. Ocellus small, posterior. Proboscis rather short. Antenna in male ciliated, cilia just over 1. Thorax without a crest. Legs and abdomen normal.

Fore wing oblong-subtruncate, moderately broad. Vein 2 from middle of cell, 3

from angle, 4 closer to 5, 7 separate to termen, 9 from 2/3 distance 10-8 ; 10 from 1/2 distance 11-9, 11 from slightly beyond middle of cell.

Hind wing without a cubital pecten ; slightly over 1, broadly semioval, vein 2 from 3/5 or 2/3 of cell, 3 and 4 connate or almost connate, from angle, 5 closely approximated at base, 6 and 7 shortly or moderately stalked.

Male genitalia. Tegumen broad and short. Uncus very broad, almost quadrate, truncate, angles rounded ; with two patches of rather thin quadrifid scales. Socius very small, free. Gnathos moderate, inverted-trapezoidal, with acutely produced angles and a slender hook. Transtilla dentate above, almost paired. Pulvinus absent. Valva small, oblong-semioval ; sacculus indefinite. Aedeagus small, slender, moderately curved at the extremities ; cornutus, one slender spine.

Type-species : *D. denotata* sp. nov.

Apparently nearest to *Pandemis* Hb., but with a complicated gnathos, thorny transtilla and small valva. These characters and also indefinite sacculus separate this form also from *Parapandemis*. The species has the appearance, rather, of an *Epichoristodes*, but the genitalia are widely different.

There are no females available.

Doridostoma denotata sp. nov.
(Fig. 57-58, 61-63)

♂ 18-19 mm. Head purplish-grey, on forehead suffused with fulvous. Palpus light tawny-vinaceous, laterally with a darker median suffused streak from base of median segment above to its apex below, terminal segment grey. Thorax vinaceous-brown, or purplish. Abdomen fuscous, venter paler.

Fore wing oblong-suboval, costa arched anteriorly, little curved posteriorly, apex obtusely pointed, termen gently sinuate above, rounded and prominent below. Fulvous, finely dusted purplish, posteriorly tending to form transverse strigulae. Markings deep coffee-brown, dull, well defined. Basal patch irregular, almost 1/3, strongly invaded by ground colour, upper half indicated only by oblique and concave edge, lower half dark purplish ; edge with tooth-like up-turned prominence at 1/3, thence inwards-oblique, to before 1/3 of dorsum ; base of costa with a blackish streak ; central fascia from slightly beyond middle, moderately broad, little dilated, to posterior 1/4 of dorsum ; its anterior edge straight, extremities slightly extended anterad along wing edges ; posterior edge concave along upper 1/3, strongly excavated above middle, excavation limited posteriorly by a rising dark tooth, edge below this regularly convex and fascia moderately thickened, with a black spot on dorsum ; costal patch large, along posterior third to apex, before apex including two small costal spots of ground colour, edged with black ; this patch with anterior edge twice convex, appearing notched in middle, acute top of patch to middle of wing, posterior edge less oblique, somewhat suffused, in left wing followed by a dark subterminal

line, little outwards-oblique ; terminal part paler with darker, blackish dotting cilia (imperfect) fulvous, ferruginous towards apex, with black marks towards dorsum.

Hind wing grey-fuscous with a golden gloss, finely strewn with darker (tips of scales). Cilia pale golden-fuscous with a blackish subbasal band.

Male genitalia. As described with the genus.

Female unknown.

Andringitra oriental, forêt d'Anjavidilava, 1 990 m, 19-25.xii.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8434 ; the same, 2 005 m, 1-15.i.1971 (*P. Griveaud*), 1 ♂, paratype.

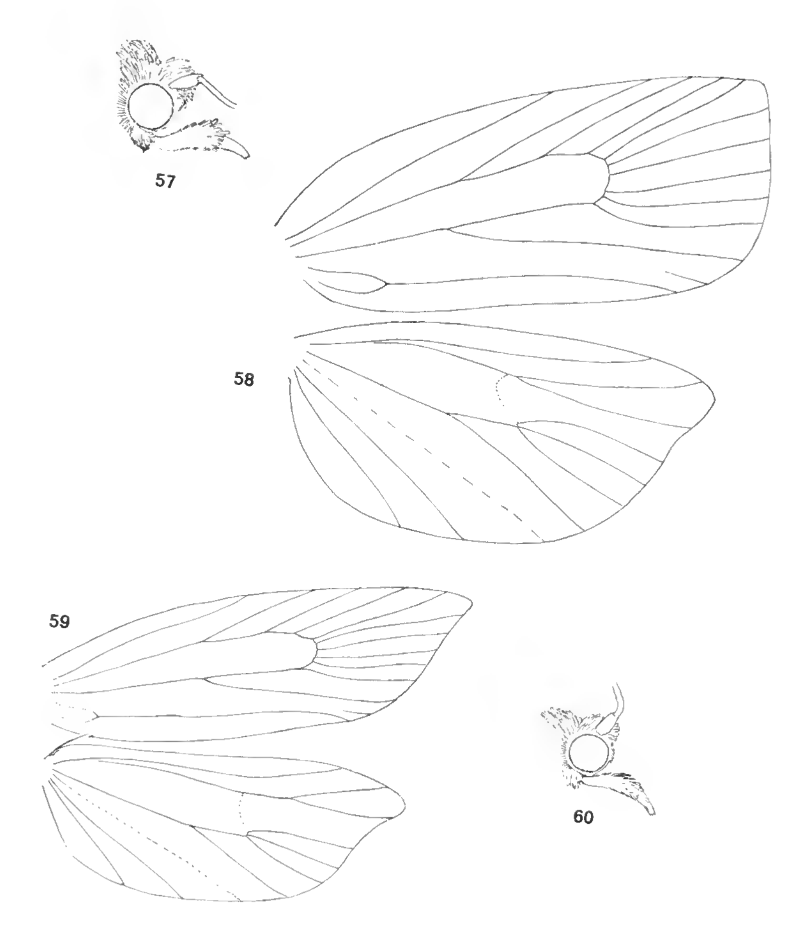


Fig. 57-60. — Sketches of heads and wing neuration of *Doridostoma* gen. nov., holotypes. 57, *D. denotata* sp. nov., head ; 58, the same, wing neuration ; 59, *D. stenomorpha* sp. nov., head ; 60, the same, wing neuration.

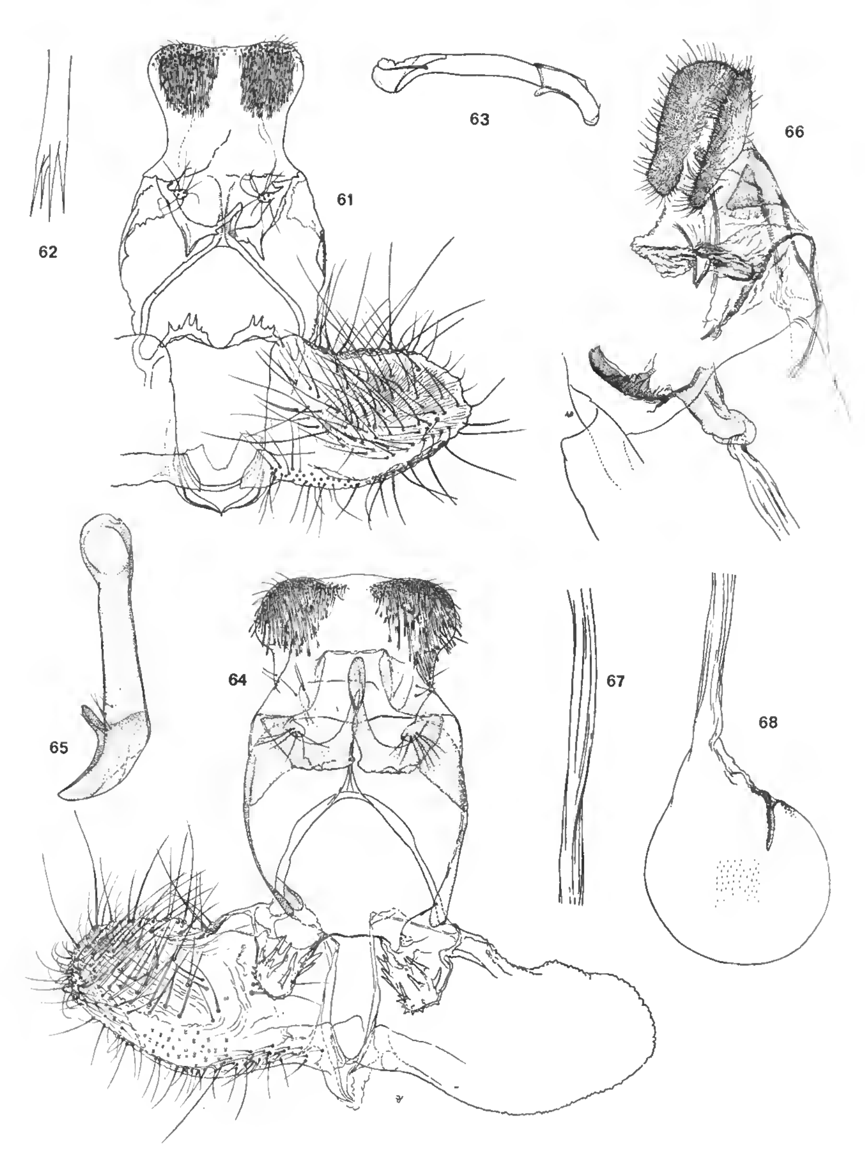


Fig. 61-68. — Genitalia of Madagascan Tortricinae. 61, *Doridostoma denotata* sp. nov., ♂, holotype; 62, the same, tip of a bristle of the uncus, stronger magnified; 63, the same, aedeagus; 64, *D. stenomorpha* sp. nov., ♂, holotype; 65, the same, aedeagus; 66, *Gephyraspis contranota* sp. nov., ♀, holotype; 67, part of ductus bursae; 68, bursa.

Doridostoma stenomorpha sp. nov.
(Fig. 59-60, 64-65)

♂ 16 mm. Head, palpus and thorax whitish, finely dusted throughout with dark fuscous, so as to appear pale grey. Abdomen whitish, dorsum infuscated, except the anal tuft.

Fore wing oblong-suboval, rather narrow, costa curved throughout, more curved at extremities, apex pointed, termen sinuate, very oblique, long. Creamy-whitish, more or less touched with fuscous, very finely but irregularly dusted with minute black points and strewn with small groups of black hair-scales. Cilia long, concolorous, with a blackish suffused subbasal band and a narrower and faint subapical line, except around tornus.

Hind wing glossy creamy-whitish, faintly tinged deeper creamy on apical half. Cilia whitish, glossy.

Male genitalia. Tegumen robust, higher than broad. Uncus very broad, almost quadrate, at the sides rounded-prominent, below with two brushes of bristles. Socius very small, free. Gnathos hooked, rather strong, arms rather broad and curved, hook oblong-oval. Valva small, over 2 × as long as broad, suboval. Transtilla, a narrow rod ; labis very large, semioval, rising, sparsely long-dentate. Aedeagus pistol-shaped, upper part straight, with a short, narrowed caecum, top of aedeagus clavate.

Andringitra oriental, forêt d'Anjavidilava, 1 975 m, 26-30.XII.1970 (*P. Griveaud*), 1 ♂, holotype, genit. slide 8498. A puzzling species with the appearance of a *Balioxena iospila* Meyr. (except for the palpi), with the male genitalia intermediate between the preceding species and *Peteliacma torrescens* Meyr., but without anything of the peculiarities of the neuration of these two genera.

Balioxena iospila Meyr.
(Fig. 69)

Meyrick, 1912 : 13. — Viette, 1948 : 57. — Clarke, 1955 : 175. — 1958 : 59, pl. 29 fig. 1-1d. — Diakonoff, 1960 : 179, fig. 80, pl. 36, fig. 236.

Distribution. Central Madagascar : Andringitra Range ; Antanarivo.

Manjarivolo (*P. Viette*), 2 ♂.

Anjavidilava, 1 990 m, 19-25.XII.1970 (*P. Griveaud*), 2 ♂.

Andringitra central, plateau d'Andohariana (Soaindrana) 2 030 m, 10-21.XI.1970 (*P. Viette*), 2 ♂, genit. slide 8249 ; 1 ♀, apallotype, genit. slide 8251.

♀ 22 mm, apallotype. Similar to male, but head pale ochreous, abdomen dark fuscous, anal tuft slaty grey, glossy.

Fore wing more pointed. Pale ochreous, from below costa to dorsum evenly suffused with brighter ochreous, becoming brighter downwards, almost orange on dorsum ; cell

throughout except on edges rather mixed with leaden-black scales, less numerous towards base ; very sparse black scales strewn on both sides of fold, and a few from cell to apex.

Hind wing brighter pale ochreous, with stronger golden gloss.

Female genitalia. Sterigma little sclerotized, with oval lateral finely punctulate tumescences. Ostium small, tubular and narrow, followed by a hyaline colliculum, below dilated in a slightly sclerotized dilatation ; cestum, a straight, gradually dilated band. Signum one, a simple hollow spike, with a small basal plate.

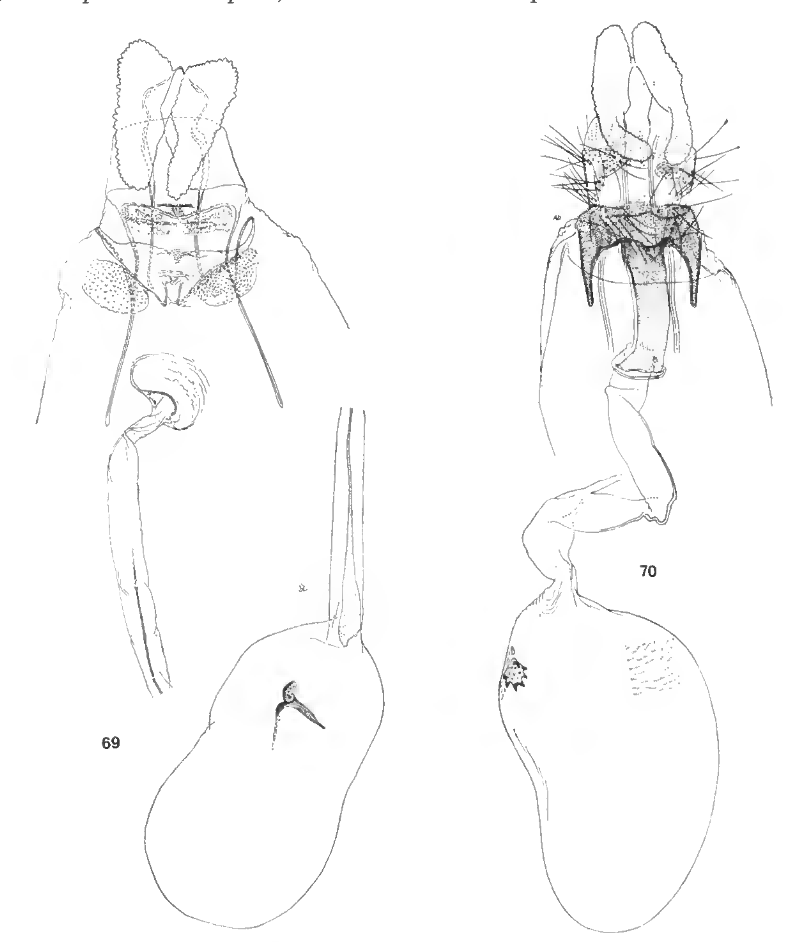


Fig. 69-70. — Female genitalia of Madagascan Tortricinae. 69, *Balioxena iospila* Meyr., ♀, apallotype ; 70, *Acleris malagassana* sp. nov., ♀, holotype.

Vialonga polyantha Diak.

Diakonoff, 1960 : 186, pl. 36, fig. 236-237.

Distribution. East Madagascar : Moramanga district.

Anjavidilava, 1 990 m, 2 005 m (*P. Griveaud*), 11 ♀, gen. slide 8341.
Manjarivolo (*P. Viette*), 1 ♀.

The male is still unknown.

Bactrostoma cinis Diak.

DIAKONOFF, 1960 : 195, fig. 86, pl. 37, fig. 241-242, pl. 38, fig. 249-250.

DISTRIBUTION. Central Madagascar : Ankaratra Range.
Manjarivolo (*P. Viette*), 2 ♂.

Furcinula punctulata Diak.

DIAKONOFF, 1960 : 199, text. fig. 88, pl. 38, fig. 254-255, pl. 39, fig. 256-258.

DISTRIBUTION. East Madagascar : Marojejy Range, 1 600 m.
Anjavidilava, 1 975 m, 26-30.XII.1970 (*P. Griveaud*), 1 ♂, genit. slide 8522.

Acleris malagassana sp. nov.
(Fig. 70)

18 mm. Head, palpus rather light tawny-fuscous. Thorax tawny-fuscous. Abdomen light golden-ochreous, venter tawny-ochreous with a crimson iridescence.

Fore wing elongate, moderately broad, costa arched at base, gently curved posteriorly, apex pointed, slightly prominent, termen sinuate, oblique. Deep tawny-fuscous with a bronze gloss, gently suffused throughout, strongly suffused over middle third with blackish, a large, obliquely oval well-defined patch, occupying basal third of costa and basal seventh of dorsum, edge over disc gradually convex, rather more rounded and prominent below costa ; this patch pale ochreous, except along edge, rather densely suffused with tawny and strewn with slightly raised dark blackish-fuscous scales ; blackish suffusion posteriorly thin and tending to be arranged along veins ; a minute blackish point halfway between apex and cell, followed by more irregularly scattered minute dark points. Cilia pale ochreous with blackish apical half (imperfect).

Hind wing pale ochreous, densely mottled throughout with pale grey, with a strong silky gloss. Cilia sordid pale ochreous.

Female genitalia. Resembling those of the Palaearctic *A. variegana* Den. & Schiff., but quite distinct. Sterigma (evenly sclerotized) with lateral appendages vertical, slender and gradually narrowed, ventral rim of ostium but slightly darker, colliculum almost twice as long as appendages of sterigma, cylindrical, sclerotized, rather wide, gently curved at lower end. Signum asteroid.

Madagascar Centre, Andringitra oriental, forêt d'Anjavidilava, 1 990 m, 19-25.XII.1970 (*P. Griveaud*), 1 ♀, holotype, genit. slide 8284.

A moderate rather narrow-winged species. The genitalia show a relation with the *A. thylacites* Meyr. group of African species.

Acleris phanerocrypta sp. nov.
(Fig. 37-38)

♂ about 16 mm. Head pale ochreous. Thorax pale ochreous, rather infuscated (imperfect). Palpus rather long and slender, median segment expanded and brushy towards apex, terminal segment slender, exposed, moderate ; pale ochreous. Abdomen fuscous.

Fore wing moderately broad (tip of wings lacking), costa moderately curved at base, straight posteriorly. Pale ochreous, rather densely dusted, dotted and marked with dark fuscous. Basal patch not reaching 1/4, regularly angulate in middle, edge straight above middle, below strongly oblique, on dorsal edge vertical, narrow but distinct ; central fascia indicated by a moderate, outwards-concave streak from before middle of costa, anterior edge triangularly prominent ; costal patch ill-defined, indicated by some four costal strigulae all about 3/4, semioval ; an interrupted dark line from below costal patch, running very oblique to halfway upper edge of cell and termen, thence little curved to termen above tornus ; a similar dark line halfway between this and termen (damaged) ; a slender marginal fuscous line along termen and in tornus ; costa strigulated fuscous between markings ; a dark fuscous dot on 2/3 of fold. Cilia pale ochreous (imperfect).

Hind wing whitish-ochreous, rather dull, very faintly dotted fuscous (dotting on underside). Cilia concolorous.

Male genitalia. Tegumen rather slender and high. Gnathos darkly sclerotized, subquadrate, the basis of the arms being connected by a dark transverse band-like subscaphium ; arms of gnathos strongly convex laterally, lower angles acutely produced, transverse part concave. Socius very long and narrow, with a lower, rigid part and a membraneous hairy part extended over it. Valva moderate, oblong-oval ; sacculus with a triangularly dilated base and a subapical long pending naked process ; cucullus hairy, rounded, with a ventral triangular appendix (digitus). Juxta very broad, triangular. Aedeagus slender, bent almost rectangularly, with two spikes (not deciduous cornuti) and a short tooth below apex.

Madagascar Centre, Andringitra oriental, rivière est, Antsifotra, formation à Agauria, 2 000 m, 2-5.xii.1970 (*P. Soga*), 1 ♂, holotype, genit. slide 8533.

Unfortunately the single specimen is rather damaged, but the male genitalia are very distinct. The species belongs to the *A. thylacitis* Meyr. group. Obviously it is not the sex partner of *A. malagassana* sp. n.

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Les articles à publier doivent être adressés directement au Secrétariat du *Bulletin du Muséum national d'Histoire naturelle*, 57, rue Cuvier, 75005 Paris. Ils seront accompagnés d'un résumé en une ou plusieurs langues. L'adresse du Laboratoire dans lequel le travail a été effectué figurera sur la première page, en note infrapaginale.

Le *texte* doit être dactylographié à double interligne, avec une marge suffisante, recto seulement. Pas de mots en majuscules, pas de soulignages (à l'exception des noms de genres et d'espèces soulignés d'un trait).

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Les *références bibliographiques* apparaîtront selon les modèles suivants :

Bauchot, M.-L., J. Daget, J.-C. Hureau et Th. Monod, 1970. — Le problème des « auteurs secondaires » en taxionomie. *Bull. Mus. Hist. nat., Paris*, 2e sér., **42** (2) : 301-304.

Tinbergen, N., 1952. — The study of instinct. Oxford, Clarendon Press, 228 p.

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